

ERIA Discussion Paper Series**No. 556****Enhancing India's Trade Competitiveness through
Inclusive Liberalisation****Rajat Kathuria***Professor and Dean, School of Humanities and Social Sciences, Shiv Nadar
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Abstract: Two decades after India began pursuing trade liberalisation through Free Trade Agreements (FTAs) and Regional Trade Agreements (RTAs), the country remains divided over their economic value and strategic implications. India now stands at a crossroads: whether to deepen engagement with mega-regional trade frameworks such as the Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), or to continue a cautious, selective approach. This paper examines India's trade performance with existing agreement partners – particularly ASEAN – to reassess prevailing concerns around trade deficits and competitiveness.

The analysis shows that India's trade deficits are often overstated and misunderstood. Much of the deficit reflects increased imports of intermediate goods, which can enhance export competitiveness by strengthening forward and backward linkages in regional value chains. India has maintained trade surpluses with several FTA partners, including within ASEAN, and its intermediate goods exports to East Asia have recently increased. Simulation results using the World Integrated Trade Solution's SMART model suggest that RCEP membership could significantly raise India's imports, largely driven by China, while CPTPP participation would generate more balanced trade effects, with potential export gains to markets such as Mexico, Canada, and Australia.

Beyond trade flows, the paper argues that selective engagement with mega-regional agreements – particularly the CPTPP – can serve as a policy anchor for improving India's business environment, regulatory coherence, and investment climate. The study proposes a framework for inclusive liberalisation that combines calibrated trade openness with domestic reforms, adjustment safeguards, and sequencing, enabling India to enhance competitiveness while managing distributional and structural risks.

Keywords: Trade Agreements, RCEP, CPTPP, India and ASEAN, Trade Deficit, India and CPTPP, RTAs, India's exports, SMART Simulation

JEL classifications: F13, F14, F15, F17, F53, O19

1. Introduction

International trade is viewed as an engine of industrial development. To benefit from it, free trade agreements (FTAs) and regional trade agreements (RTAs) have emerged as ways for nations to deepen market access and boost economic growth. The agreements offer pathways to boost exports, attract foreign investment, and integrate with global value chains (GVCs). Originally focused on eliminating tariffs and duties on goods, as originally defined by the General Agreement on Tariffs and Trade (GATT), the scope of FTA and RTA negotiations has broadened to encompass services, investments, data protection, labour and environmental standards, intellectual property rights, and digitalisation. The increasing role of regional trade blocs in global integration has come to the fore for several reasons, including the crisis in multilateralism reflected in the paralysis of the World Trade Organization (WTO).

The idea of RTAs is not new. Since the signing of GATT in 1948 and the formation of the European Community in 1956, countries have pursued economic integration through regional pacts. Examples include the European Free Trade Association (EFTA) established in 1960, the North American Free Trade Agreement (NAFTA) of the early 1990s, and the formation of the European Union (EU) in 1993. Whilst RTAs can stimulate trade amongst member countries, the evolution towards deeper economic union requires careful consideration of how these blocs interact with non-members on commonly agreed norms.

Unlike mutually beneficial arrangements amongst developed nations (like the EU), emerging markets in Asia have faced unique challenges in signing FTAs. These challenges include concerns about political sovereignty, limited intra-regional trade, and the lack of robust regional institutions to manage economic cooperation. Consequently, the focus shifted towards bilateral FTAs in the late 20th century. Research shows that the success of any trade agreement hinges on its design, implementation, and ability to complement domestic reform programmes (World Bank, 2005).

India's foray into FTAs began in the 1990s as an addition to multilateralism, largely to gain market access and import raw materials and capital goods critical for development. The stalemate of the Doha Round negotiations was the proximate reason for renewed interest in emerging economies, including India, to pursue further trade liberalisation through regional trade agreements. For India, the turning point was 2004. Two decades on, an animated debate around the usefulness of these trade agreements rages in India, including amongst policymakers. The rhetorical question of why India 'suffers' trade deficits with agreement

partners is as instructive of the political discourse as it is misleading about the economic impact of trade agreements.

When structured well, FTAs and RTAs that encourage trade in intermediate goods can foster productivity within global or regional value chains. However, trade liberalisation efforts have faced interruptions in recent years. The United States (US)-China trade war of 2017–2018 and the COVID-19 pandemic since 2020 disrupted long-established supply chains and promoted more protectionist trends. These disruptions raised questions about the future of the rules-based trading system, especially in light of the enfeebling of the WTO. Nevertheless, studies such as those by Gupta (2024) and the International Monetary Fund (IMF, 2022) show the resilience of economies as they adapt to demand and supply shocks. For instance, in the Group of Twenty (G20), intermediate trade under GVCs recovered rapidly post-COVID-19 (Gupta, 2024). That said, there is no denying that the pace of globalisation has slowed, giving rise to phraseology such as ‘slowbalisation’ (Garcia-Herrero, 2022). There is also a rising trend of reshoring production processes by advanced economies, like the US, away from China.

Deglobalisation has been reflected in the rise of non-tariff barriers, affecting countries like India, at a time when access to international markets is more crucial than ever. India has consistently championed free trade for mutual benefit whilst emphasising the importance of a robust multilateral trading system under the WTO. Notably, during its G20 presidency in 2023, India, along with other member states, recognised the need for a rules-based multilateral trading system and emphasised its potential to create resilient, sustainable, open, inclusive, and reliable GVCs. This appetite for multilateralism might have prevented India from fully embracing FTAs and RTAs.

Hyperglobalisation has also sparked a debate amongst economists that extends beyond the pure economic benefits of trade. Rodrik (2022) argues for a nuanced approach, emphasising the need for complementarity between market reforms and government intervention. This approach aims to create a more resilient version of globalisation that benefits all stakeholders and becomes a cornerstone of future trade negotiations. He emphasises the importance of integrating issues like labour rights and environmental sustainability into trade negotiations. The majority of studies in this area have found mixed results, highlighting potential drawbacks like increased income inequality and current account deficits alongside potential benefits like higher output and export expansion.

Prominent regional trade agreements, namely, the Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP), are gaining pre-eminence, in part due to the decline of the WTO. As the world’s

fifth-largest economy with a gross domestic product (GDP) almost exceeding US\$4 trillion, India finds itself at a crossroads. Should it embrace or abstain from participation in RCEP and the CPTPP? This study investigates this strategic question by examining the potential consequences of these agreements, considering both economic and geopolitical factors.

On one hand, India has excelled in services trade, but on the other hand, its participation in GVCs for goods remains limited. Historically, it has had limited engagement in key GVC sectors like transport, electronics, chemicals, metals, and textiles. Hence, India's ambitious 'Make in India for the World' initiative requires deeper market integration. In this regard, trade agreements could act as an instrument. Past RTAs and FTAs, such as those with ASEAN nations, amongst others, however, have not delivered trade surpluses for India, creating political opposition to such arrangements. This study investigates the effect of India's participation in the CPTPP and RCEP through primarily an economic lens. As of May 2024, there were 371 trade agreements in place, of which India was a member of only 13.

The overarching reason for this study is to determine the potential economic benefits and costs of joining RCEP and the CPTPP for India. These are two mega trade blocs that currently dominate world trade. Proponents argue that FTAs can unlock significant benefits, such as increased market access, foreign investment inflows, and enhanced competitiveness. However, concerns linger around job losses, import surges, impact on domestic industries, and erosion of policy autonomy. By carefully examining these trade-offs, the study aims to provide a comprehensive analysis of the role FTAs could play in India's economic trajectory.

India began to recognise the potential benefits of deeper market access offered by FTAs only recently. This paper, therefore, also provides a historical perspective of the intricate calculus behind India's approach to trade liberalisation. We explore India's commitment to multilateralism whilst also foregrounding ambitious initiatives like 'Make in India for the World' that could benefit from trade pacts. This study seeks to critique India's cautious approach to FTAs and RTAs. Specifically, it seeks to:

- a) trace India's trade policy evolution;
- b) explore the challenges and economic opportunities in joining mega trading blocs along with the pursuit of trade facilitation and liberalisation;
- c) understand the positive and negative impacts of trade liberalisation, particularly for manufacturing; and
- d) provide policy recommendations to enhance the benefits of trade engagement.

The data for the study are obtained from several sources, including UN Comtrade/World Integrated Trade Solution (WITS), the International Trade Centre's (ITC) Trade Map, the Export-Import Data Bank of India, and the Department of Commerce of the Government of India. Data have also been obtained from the Asian Development Bank (ADB), UN Trade and Development (UNCTAD), the Organisation for Economic Co-operation and Development (OECD), Statista, and CEIC. The paper explicitly utilises the WITS SMART Simulation Model to determine the effects on India's trade if the country were to join RTAs and FTAs, such as RCEP and the CPTPP, and bilateral treaties such as with the European Union (EU) or the United Kingdom (UK).

The rest of the paper is organised as follows: the next section briefly discusses the literature on trade liberalisation, keeping India in focus. The third section examines the policy dilemma faced by India towards deepening engagement through FTAs and RTAs. This is followed by an empirical section on India's trade deficit and its bifurcation into finished and intermediate goods. The fifth section is the core of the study and presents the results of the simulation model of India's exports and imports should it join RCEP, the CPTPP, and other bilateral treaties. The concluding section suggests policy measures for the way forward.

2. Literature: Trade policy, liberalisation, and FTAs and RTAs

Global trade has floundered since the 2008–2009 crisis, plagued by uncertainties. Since then, the debate of free trade versus protectionism has taken centre stage amongst various stakeholders, including governments, think tanks, and businesses. The debate intensified in the aftermath of the US-China trade war and the COVID-19 pandemic (IMF, 2022; Kapustina et al., 2020; Kwan, 2019; Pohit et al., 2019). Questions have been raised about the effectiveness of multilateralism, especially due to unilateral action by the US in weakening dispute settlement in the WTO, along with growing supply chain disruptions. This has paved the way for more regional integration.

The role of Asian countries, particularly ASEAN countries, China, and India, has become increasingly prominent in shaping the process of trade liberalisation in the world trade order. These countries have been active negotiators of free trade agreements for the past 3 decades. This has become even more important in recent years, as developed countries are attempting to reshore a portion of their production back from Asia.

2.1 The ambiguous impact of trade engagement

Several studies have analysed the potential economic effects of trade liberalisation, particularly its impact on growth and inequality in developing countries. These studies highlight the complex relationship between trade liberalisation and outcomes, such as income equality; higher output; export growth; the interplay with non-tariff factors, including infrastructure, logistics, and the business environment; economic expansion; and innovation. The specific effects depend on a country's implementation of policies, the nature of its industries and firms, and the long-term perspective (Khan et al., 2021; WTO, 2020; IMF, 2019, 2001; Bannister and Thugge, 2001). Acharya (2015) argues that whilst trade liberalisation can enhance growth in developing economies, deep economic restructuring is necessary to ensure that these benefits have a positive trickle-down effect. Yameogo and Omojolaibi (2021), for example, suggest that trade liberalisation can lead to long-term poverty reduction but may also entail short-term negative effects for sub-Saharan Africa. Manni and Ibne Afzal (2012), using Bangladesh as a case study, find that increased openness and trade liberalisation led to higher GDP growth and real export value. This reinforces the findings of Shu and Steinwender (2019), who suggest that trade liberalisation can spur productivity and innovation in emerging economies.¹

However, the picture is not always entirely positive. Zakaria (2014) found negative effects like the worsening of the trade balance in Pakistan's case. Similarly, Fukuda (2019) argues that trade liberalisation leads to a higher growth rate only when the population size is smaller. Li et al. (2018), analysing China, highlight that increased trade openness can lead to higher output but also higher income inequality. Mishra and Kumar (2005) show that trade liberalisation in India has caused wage inequality.

In the context of this debate, the question of whether FTAs and RTAs promote gains amongst member countries is also relevant. As stated above, there has been a significant rise in the number of RTAs and FTAs recently, especially amongst the emerging economies of Asia. However, gains from these agreements have been contested. For India, the trade agreement with ASEAN has been the subject of extensive critique (Khatai and Kim, 2023; Garg, 2022; Huria, 2020; Pant and Paul, 2018). On the other hand, Kaushal (2022) shows a rise in India's exports under ASEAN. Moreover, the content of these newer agreements has been transformed

¹ Similarly, Dani Rodrik, in his papers, challenges the traditional view that trade liberalisation automatically increases income inequality. He argues that domestic policies and institutional arrangements play a crucial role.

to include services and investment provisions (Tatkare and Vasava, 2023). However, India's exports or trade with regional or bilateral partners have remained below potential.

Pant and Paul (2018) argue that RTAs themselves do not guarantee heightened trade. They emphasise that a critical volume of pre-existing trade between potential FTA partners is necessary for generating gains from such agreements. For India, a clear causal link between GDP growth and export growth does not exist. Some studies show a positive relationship between export and GDP growth, but there is also evidence that points to a negative relationship (in a post-agreement regime), implying that GDP growth may lead to slower export growth, potentially exacerbating trade deficits (Ghoshal, 2015).

Pandey and Unnikrishnan (2023) record weak performance of trade agreements for India. They point to an increase in the trade deficit and a negative impact on export competitiveness and the corresponding potential in key sectors. India's exports consist of low-value-added items, whilst imports from FTA partners are high-end items. Some FTA partners are India's competitors in the global market, such as China, Indonesia, and Thailand. For India to reap the benefits of trade agreements, domestic reforms aimed at boosting manufacturing growth are ultimately crucial (Krishna, 2019). These reforms are critical for agreements to generate positive spillover effects beyond merely market access. Using the case of India's textile industry, a more SME-centric approach is prescribed to make trade agreements more inclusive (Bajaj and Sharma, 2022).

Since 2019–2020, discussions related to FTAs in India have centred around strengthening domestic value chains and enhancing local content. Globally, trade policies have reflected a narrative of de-risking, diversification, and reshoring, primarily directed at reducing dependency on China. As countries attempt to reorient supply chains away from China, India has a golden opportunity to position itself as a viable alternative. However, this would need consistent and credible policy reforms that remove existing bottlenecks so that India can become a reliable partner in global supply chains. This cannot happen by imposing import tariffs arbitrarily. Elsewhere, countries like Viet Nam and Bangladesh, amongst others, are well placed to attract trade and investment that might otherwise be destined for India.

Despite undertaking periodic trade reform, the empirical literature concludes that India remains a marginal participant in GVCs. The future might also appear bleak unless there is change in India's stance on domestic policy reform and geopolitical issues (Escaith, 2021; Gupta, 2024; ORF, 2021, 2022; Seshadri, 2022; Petri and Plummer, 2023; Hoda and Rai, 2014; Salama, 2023; Zhang, 2021; Kearney, 2023; Randhawa, 2019; Mohanty, 2024). The major findings of this vast literature are the following:

- India has not leveraged the opportunities arising from de-risking and the diversification of GVCs.
- Reshoring will impact India's existing trade relations with the West, mainly the US.
- India's reluctance to join one of the largest global FTAs, i.e. RCEP, is not well articulated.
- The discourse on whether India should join the CPTPP is either absent or, if present, based on weak scholarship.
- Empirical evidence shows that foreign direct investment (FDI) is inextricably linked with trade, and India continues to have lower FDI inflows as compared to its ASEAN peers.
- E-commerce has changed the rules of the game for manufacturing and trade across the world, but India has been reluctant to discuss e-commerce in the WTO.
- India's MSME competitiveness and GVC participation are still amongst the lowest.
- India's FTA-driven GVC integration has shown some progress, but scaling up is needed to reduce deficits, and regular trade policy reviews are essential for improved market access with FTA and RTA partners.

In contrast to many East Asian and Southeast Asian economies, India has struggled with export-led industrialisation. The proliferation of GVCs in world trade and India's lack of participation have further underscored this challenge. Since 2013–2014, there has been a decline in Indian exports, a period conspicuous for declining global exports as well. The complexities and contradictions in India's foreign trade regime have become apparent, along with the seduction of the domestic market and the tricky business environment.

In light of the above, the Foreign Trade Policy (FTP) 2015–2020 was visionary. It clubbed many schemes together to boost exports and jobs. It focused on increasing domestic value addition and linking into GVCs and aimed at doubling India's total exports, increasing its share in world trade from 2% to 3.5%. The major focus areas included trade facilitation in the manufacturing and services sectors, ease of doing business, and incentives for those exports and imports that provide extra support for industrial growth, infrastructure, IT, communication, skill development, and employment creation.

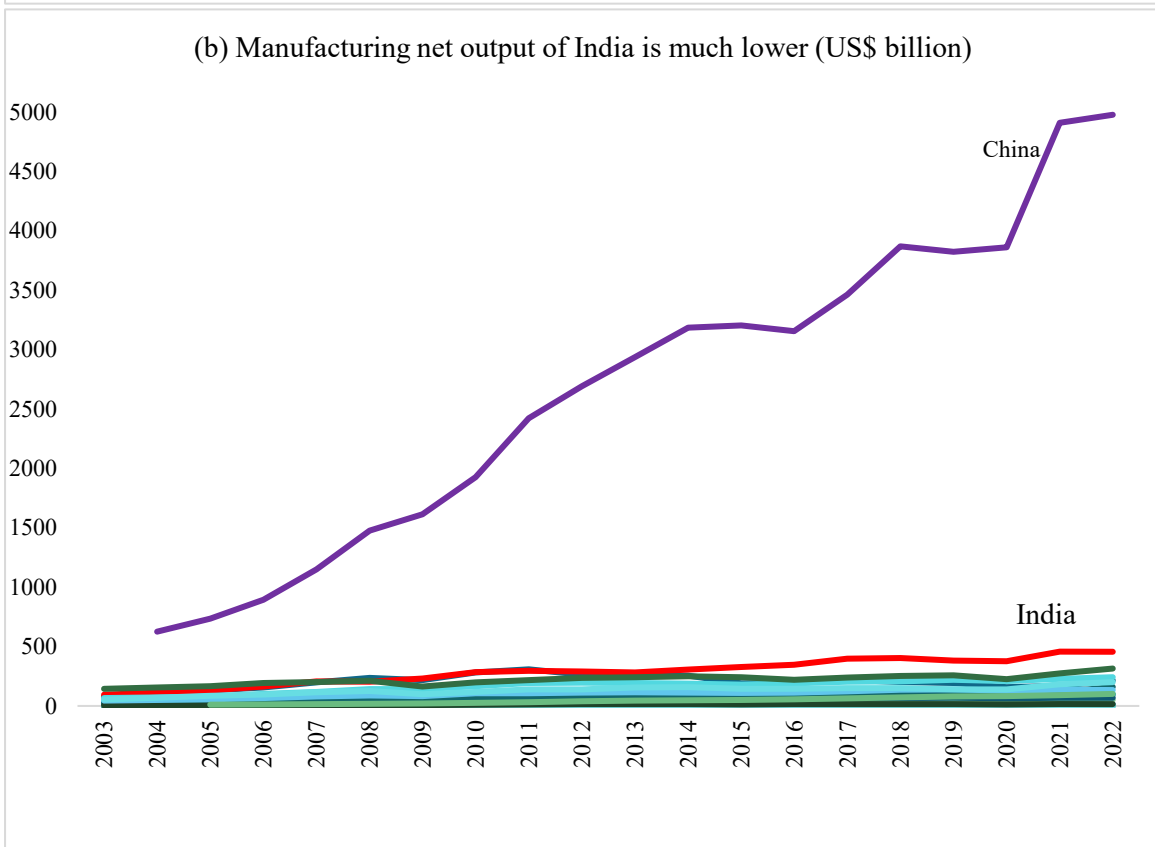
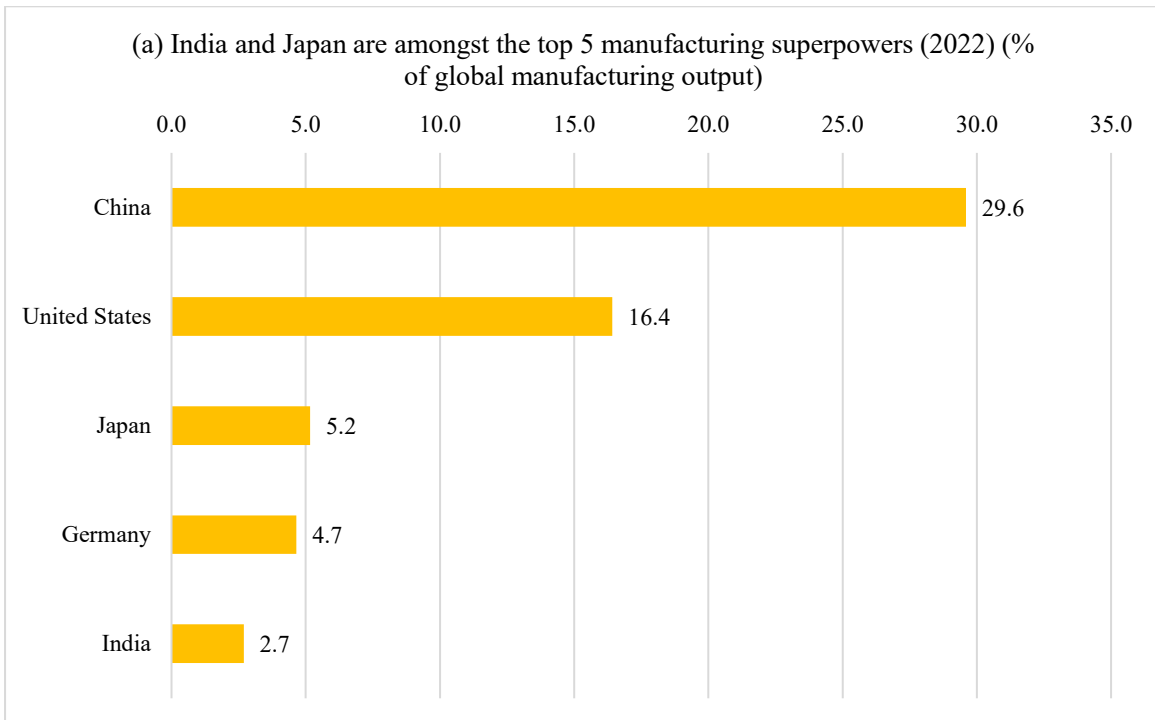
FTP 2023 builds on the previous policy, embracing ambitious targets. One of the main aims is to boost India's exports to US\$2 trillion by 2030, including US\$1 trillion in manufactured goods. This aim needs to be tempered by an increasingly protectionist global environment. Srivastava et al. (2022) argue that emerging economies like India can attain much larger benefits of trade by joining mega trading blocs. India is not well-served by its pursuit of

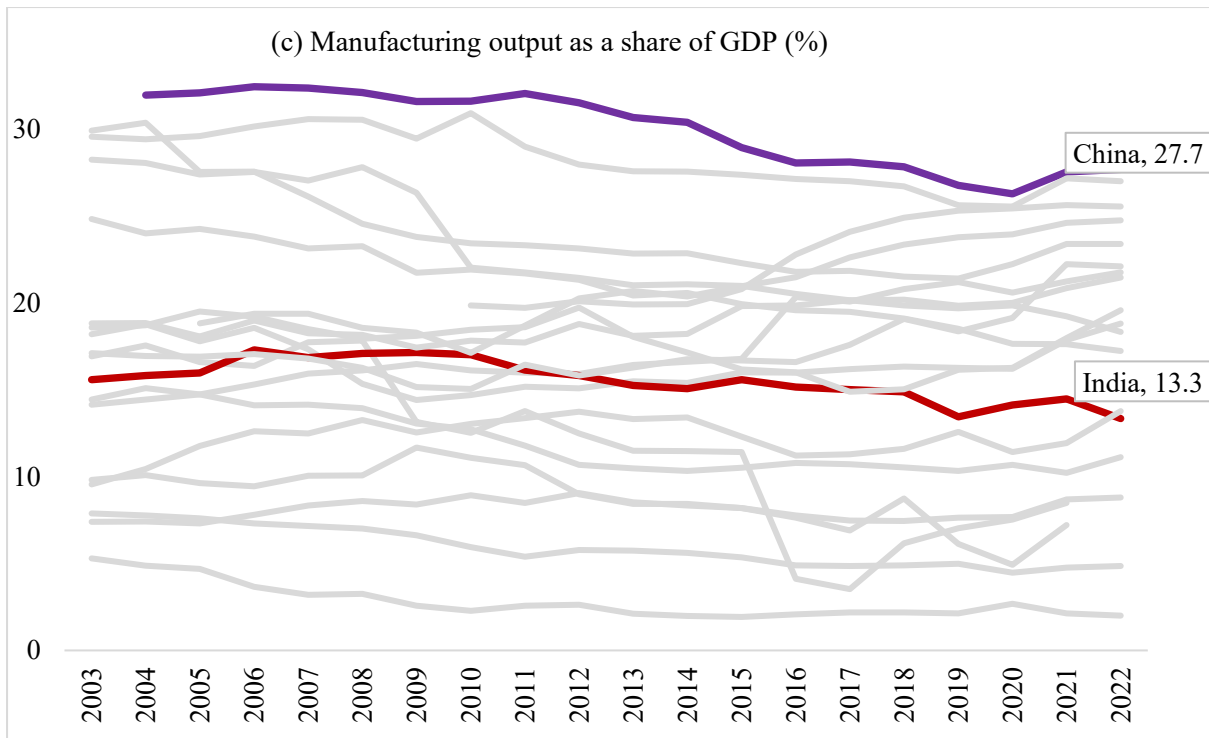
a protectionist agenda and instead should push for trade liberalisation as a better path for the global trading system. Promising signs are visible as India strategically engages in supply chain initiatives, such as the Indo-Pacific Economic Framework with the US and ASEAN, the Supply Chain Resilience Initiative with Australia and Japan, and its recent FTAs with the United Arab Emirates and Australia (Gupta, 2024). India's participation in GVCs and, above all, its future ambitions from international trade cannot be achieved by playing hide and seek. It needs greater trade than ever before, along with a gradual increase in domestic value addition (Mishra et al., 2022). This paper charts a path towards achieving that ambition.

3. Policy Dilemma for India: Trade and Manufacturing

The vision of the Government of India (GoI) is to make India a global manufacturing hub whereby it is expected to add more than US\$500 billion in annual economic impact to the global economy by 2030. This is complemented by aspirations to increase the volume of India's exports of goods to US\$1 trillion by 2030 and overall exports of goods and services to US\$2 trillion. Naturally, these targets are predicated on increased participation in GVCs. At current trends, these targets seem unachievable. Whilst India's manufacturing output has improved over 20 years (2003–2022, see Figure 1(a) and (b)), India's share of manufacturing in GDP is still declining (Figure 1(c)). Besides, a significant gap exists in the manufacturing output of India and China (Figure 2(b)). Although India is closing the gap with China in terms of trade openness (Figure 2(a)), India's export share is much lower. India's continuous low export performance raises doubts about whether the targets are overambitious.

Figure 1: India's Manufacturing Output Trends

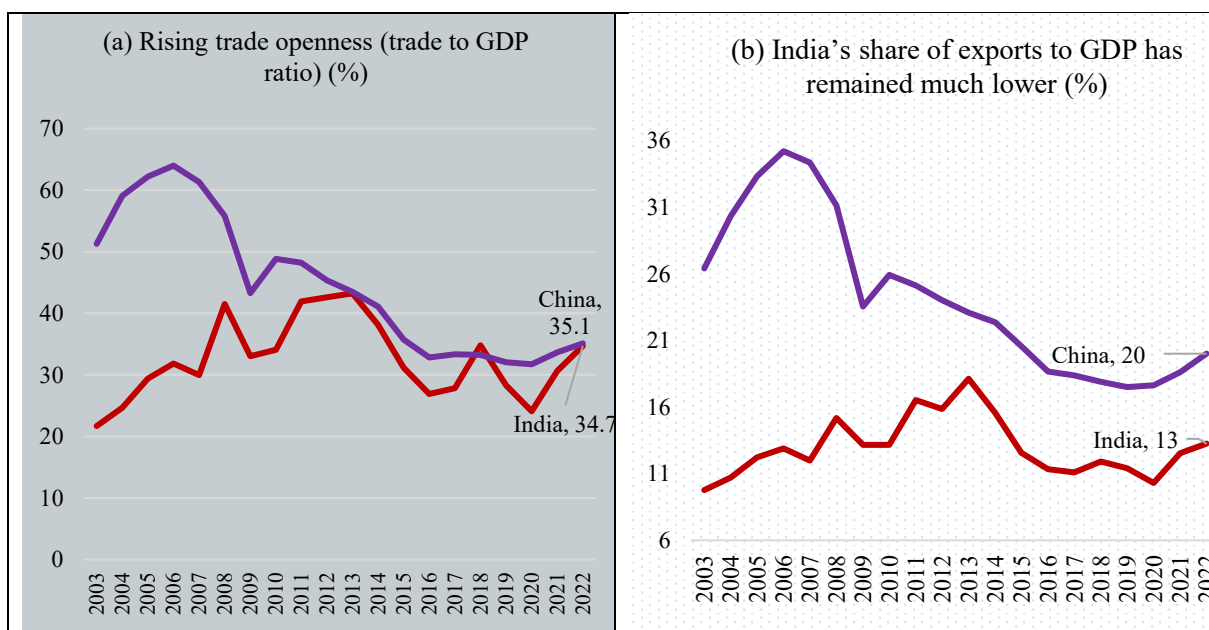




Source: World Development Indicators, World Bank.

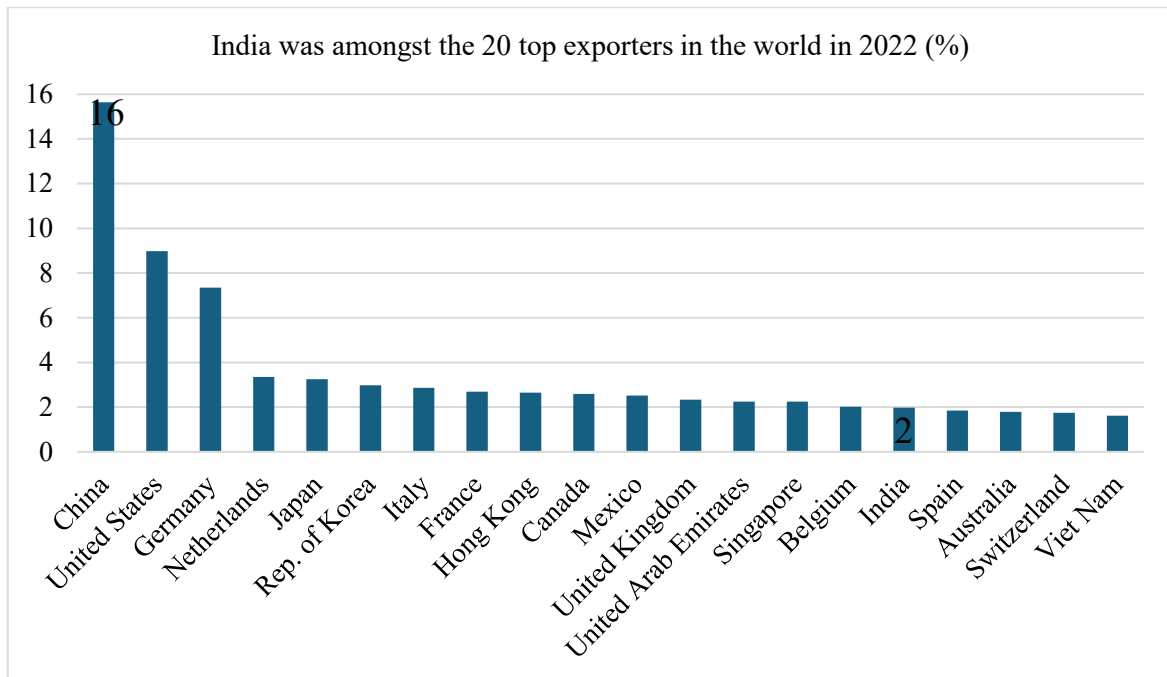
India has endured an uninterrupted trade deficit compared to China (Figure 5(a) and (b)), and whilst economically advantageous in many respects, it has become a politically challenging issue, undermining the value of imports in spawning more exports under GVCs.

Figure 2: India's Trade to GDP Ratio and Exports to GDP Ratio



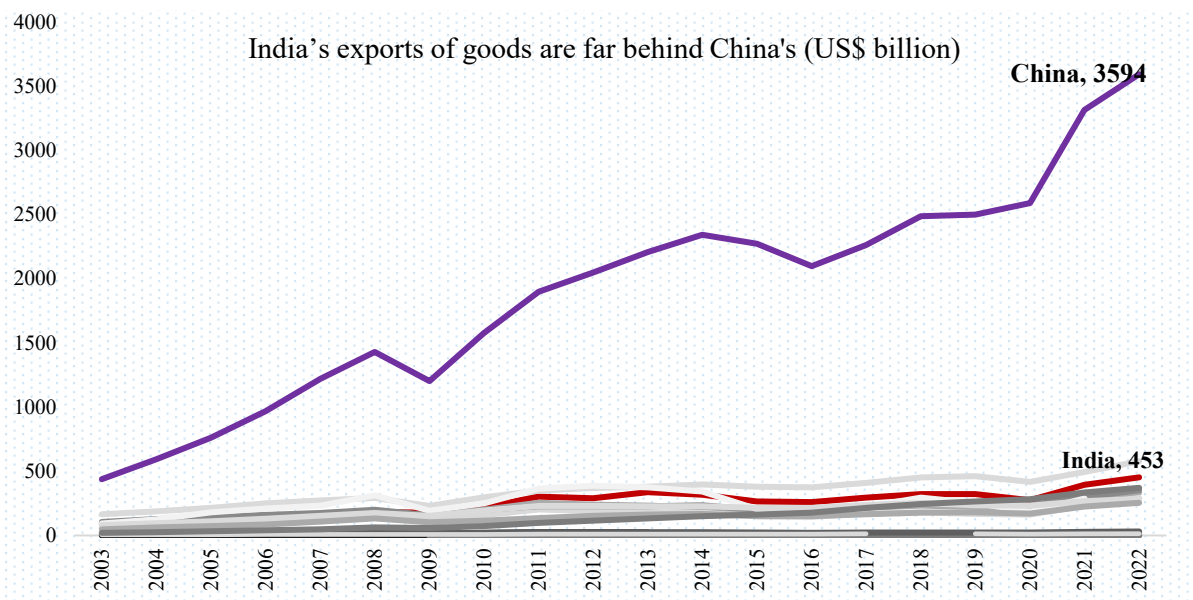
Source: World Development Indicators, World Bank.

Figure 3: Top Exporters in the World



Source: World Integrated Trade Solution (WITS) database, World Bank.

Figure 4: Exports Value of Selected Asian Economies Plus Mexico

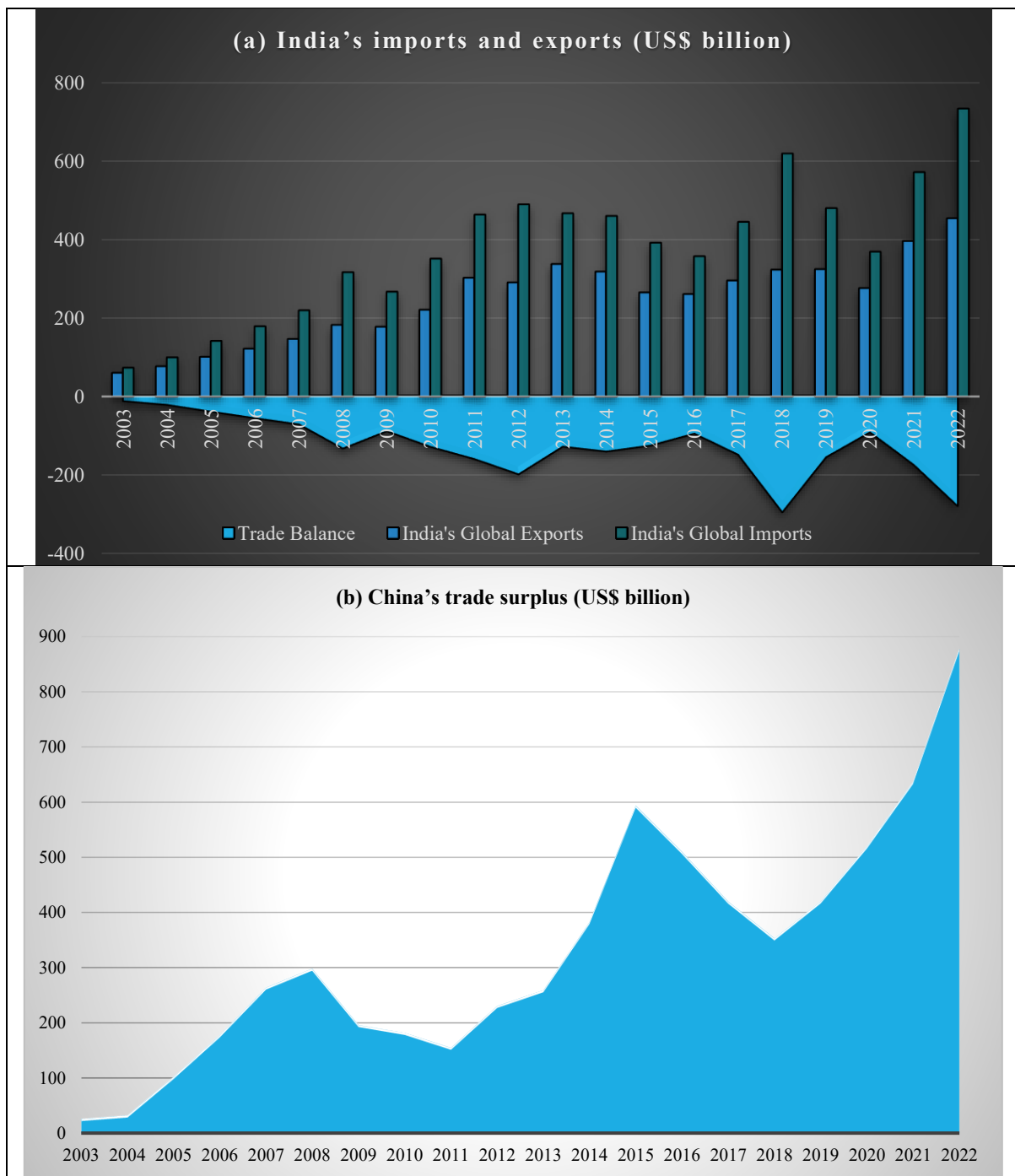


Note: Countries include China, India, Indonesia, Malaysia, Philippines, Thailand, Vietnam, Afghanistan, Bangladesh, Bhutan, Cambodia, Lao PDR, Myanmar, Maldives, Sri Lanka, Nepal, Brazil, Mexico, Saudi Arabia, Pakistan, and Türkiye.

Source: World Integrated Trade Solution (WITS) database, World Bank.

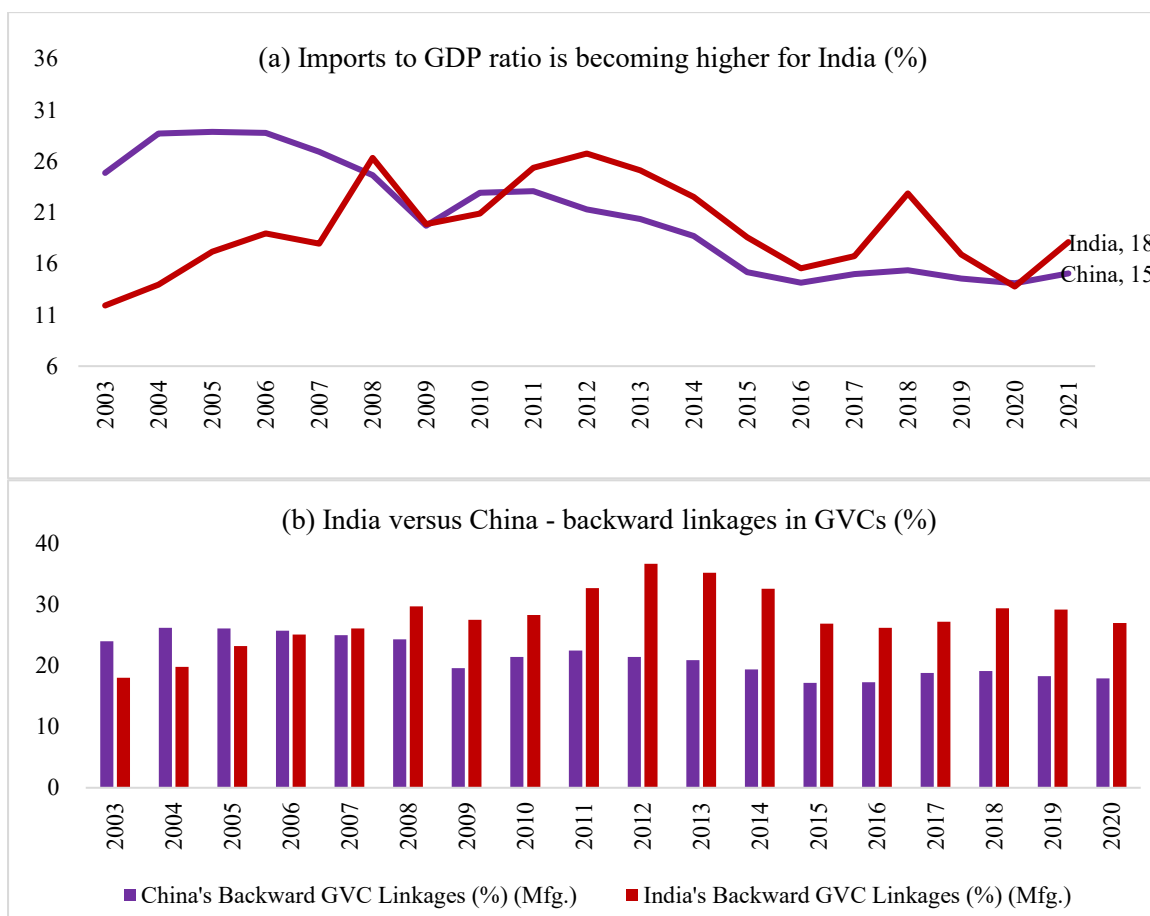
Interestingly, India's ratio of manufactured imports to GDP is now marginally higher than China's. In contrast, backward linkages in GVCs (imported content/foreign value added (FVA) as a share of exports) have been significantly more than China's since 2008 (Figure 6(a) and (b)). However, in value terms, India's GVC trade in manufacturing is dwarfed by China's (Figure 7).

Figure 5: Difference between India and China's Trade Balances



Source: World Integrated Trade Solution (WITS) database, World Bank.

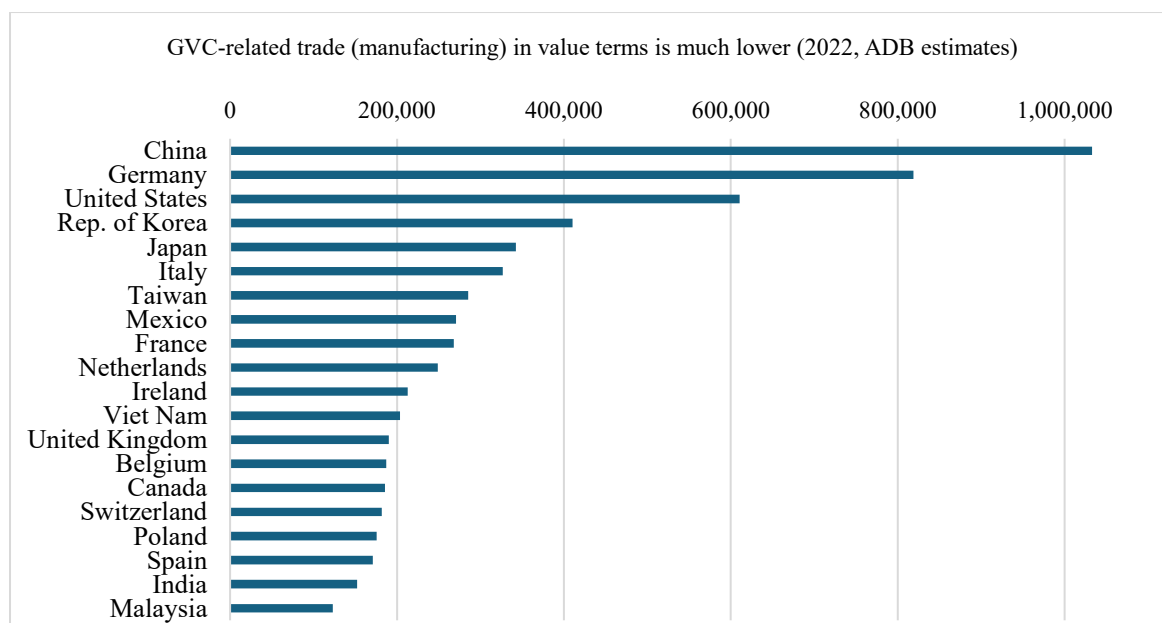
Figure 6: India's Linkages via the Import Side Compared to Those of China



Mfg. = manufacturing.

Source: World Integrated Trade Solution (WITS) database, World Bank; OECD-WTO TiVA database.

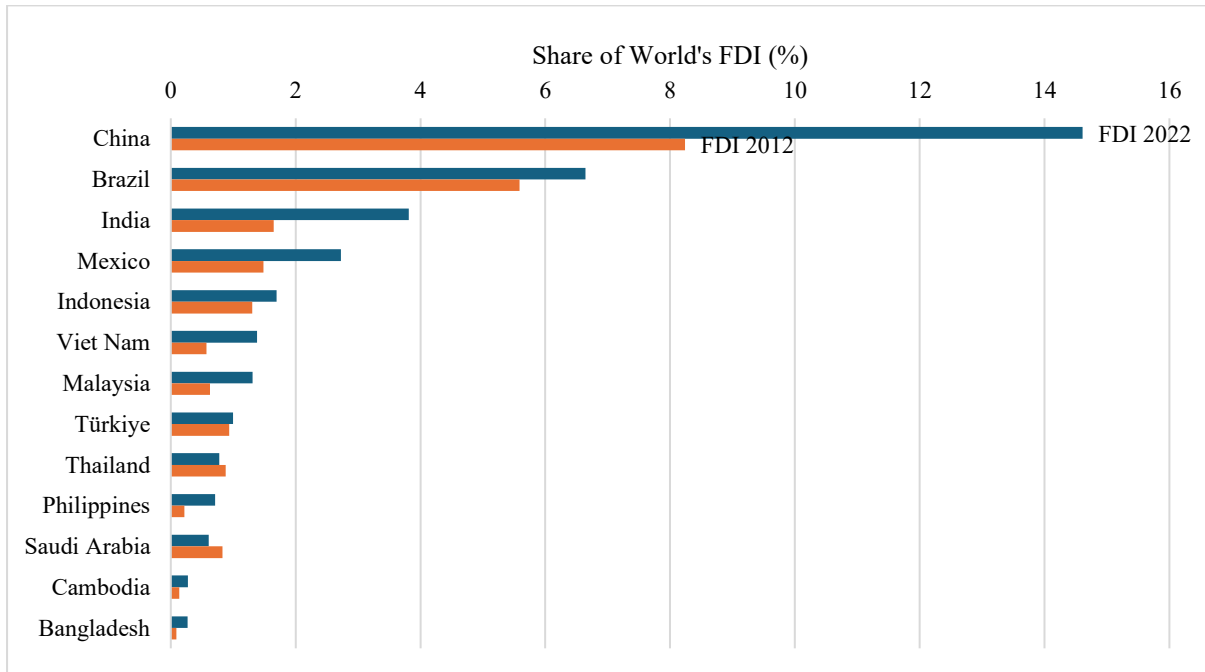
Figure 7: Countries' GVC-related Trade



Source: OECD-WTO TiVA database; ADB GVCs database.

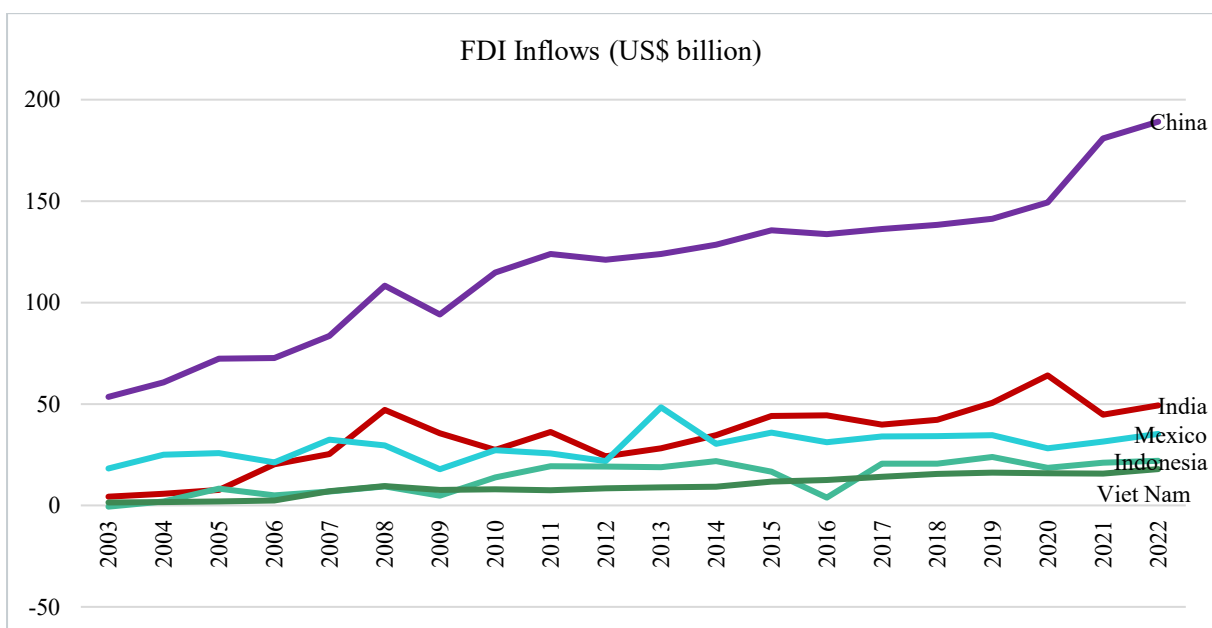
One major reason is India’s low share of global FDI. In other words, China greatly leveraged the massive FDI inflows to enhance participation in GVCs (Figures 8 and 9). One way India could enhance FDI inflows is through the appropriate negotiation and utilisation of FTAs and RTAs. We explore this aspect in the rest of the paper.

Figure 8: Top 10 Countries Based on FDI Inflows



Source: UNCTADstat Data Centre.

Figure 9: Countries’ FDI Inflows



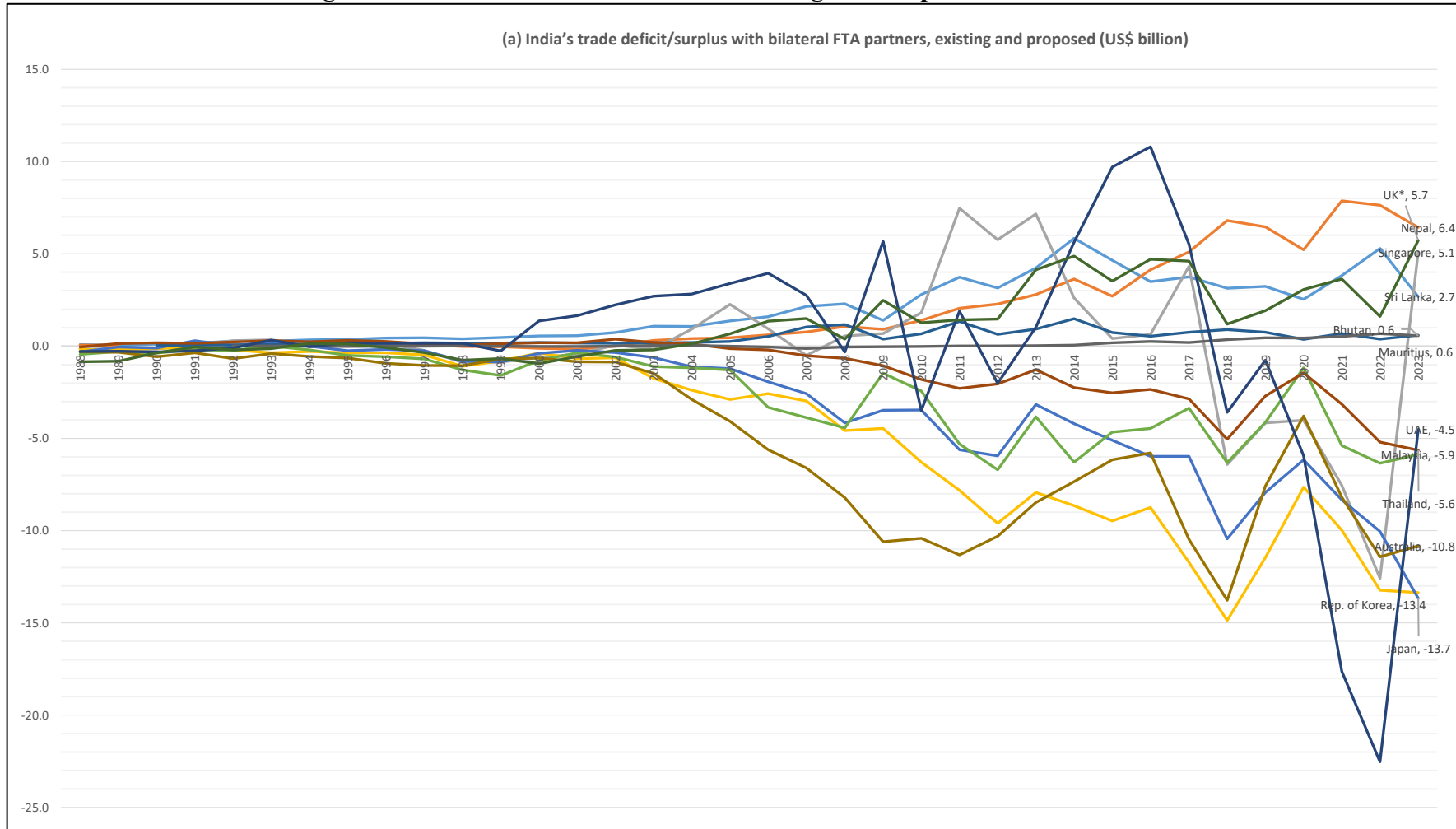
Source: UNCTADstat Data Centre.

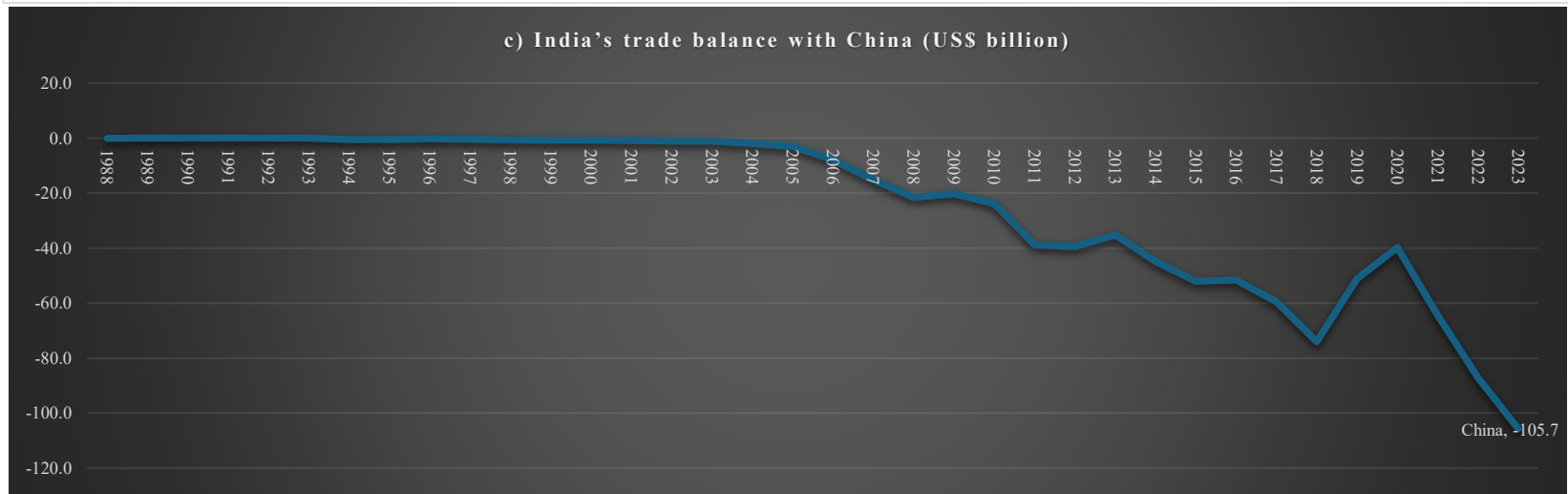
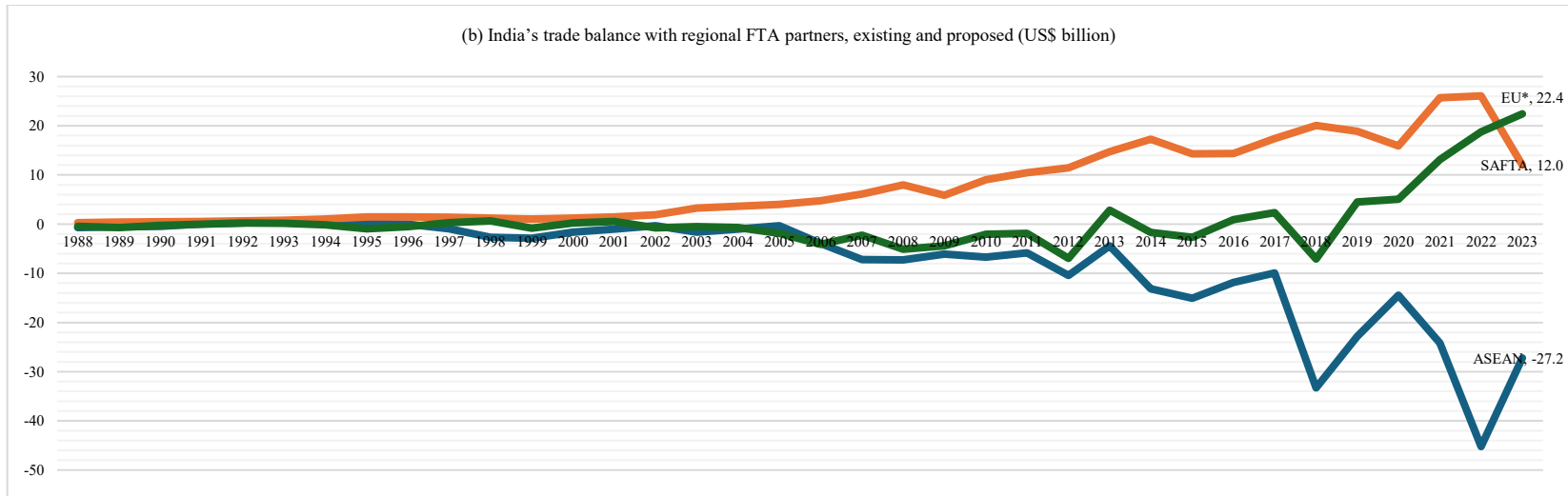
4. Analysis of India's Engagement with Trade Agreements

This section examines India's trade relations with existing as well as proposed partners. Since 1988, India has experienced rising trade deficits. India's hesitancy to participate more deeply in international trade whilst pursuing domestic reform comes from an unconstructive narrative stemming from its adverse trade balance with FTA and RTA partners (Figure 10(a) and (b)). India's trade deficit has increased, primarily with ASEAN and its member countries with whom India has bilateral FTAs, as well as with East Asian economies like Japan and the Republic of Korea (hereafter, Korea). China (a non-FTA partner) enjoys a trade surplus of over US\$100 billion with India (see Figure 10(c)).

Whilst exports have also increased after joining trade agreements, these have grown at a slower pace and at lower levels than imports. India's growing trade deficit is not only with ASEAN but also with some individual members of the proposed mega RTAs, namely in RCEP and CPTPP groups (Figure 11(a)–(c)). Interestingly, India's imports from RCEP would be half if China were not included. In other words, if one were to hypothetically exclude China from RCEP, the opposition to RCEP might reduce. Under the CPTPP, India's trade deficit is five times lower than with RCEP members, even though ASEAN countries are common to both groupings. Needless to say, the China effect dominates RCEP as far as India is concerned. China contributes more than 40% to India's imports from RCEP countries and less than 20% to India's exports (Figure 11(b)). Whilst India's trade with CPTPP members is lower than RCEP, it has potential because of a lower base.

Figure 10: India's Trade Balance with Existing and Proposed FTAs and RTAs



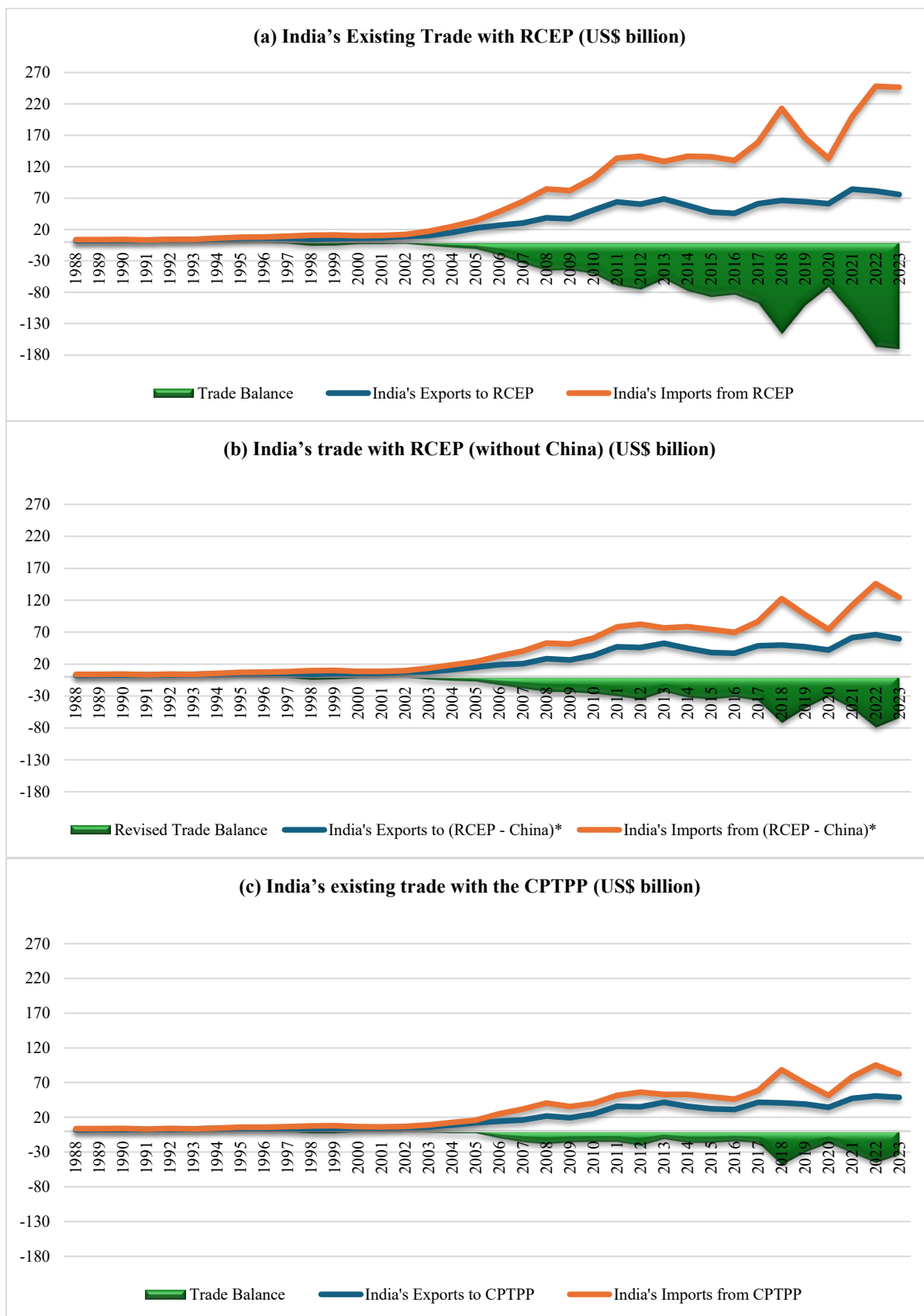


ASEAN = Association of Southeast Asian Nations, EU = European Union, SAFTA = South Asian Free Trade Area, UAE = United Arab Emirates, UK = United Kingdom.

Note: * denotes India's expected/proposed FTAs/RTAs members

Source: World Integrated Trade Solution (WITS) database, World Bank.

Figure 11: India's Existing Trade with RCEP members and with RCEP (without China) vis-à-vis CPTPP Members



Note: * denotes hypothetical estimates for (RCEP – China).

Source: World Integrated Trade Solution (WITS) database, World Bank.

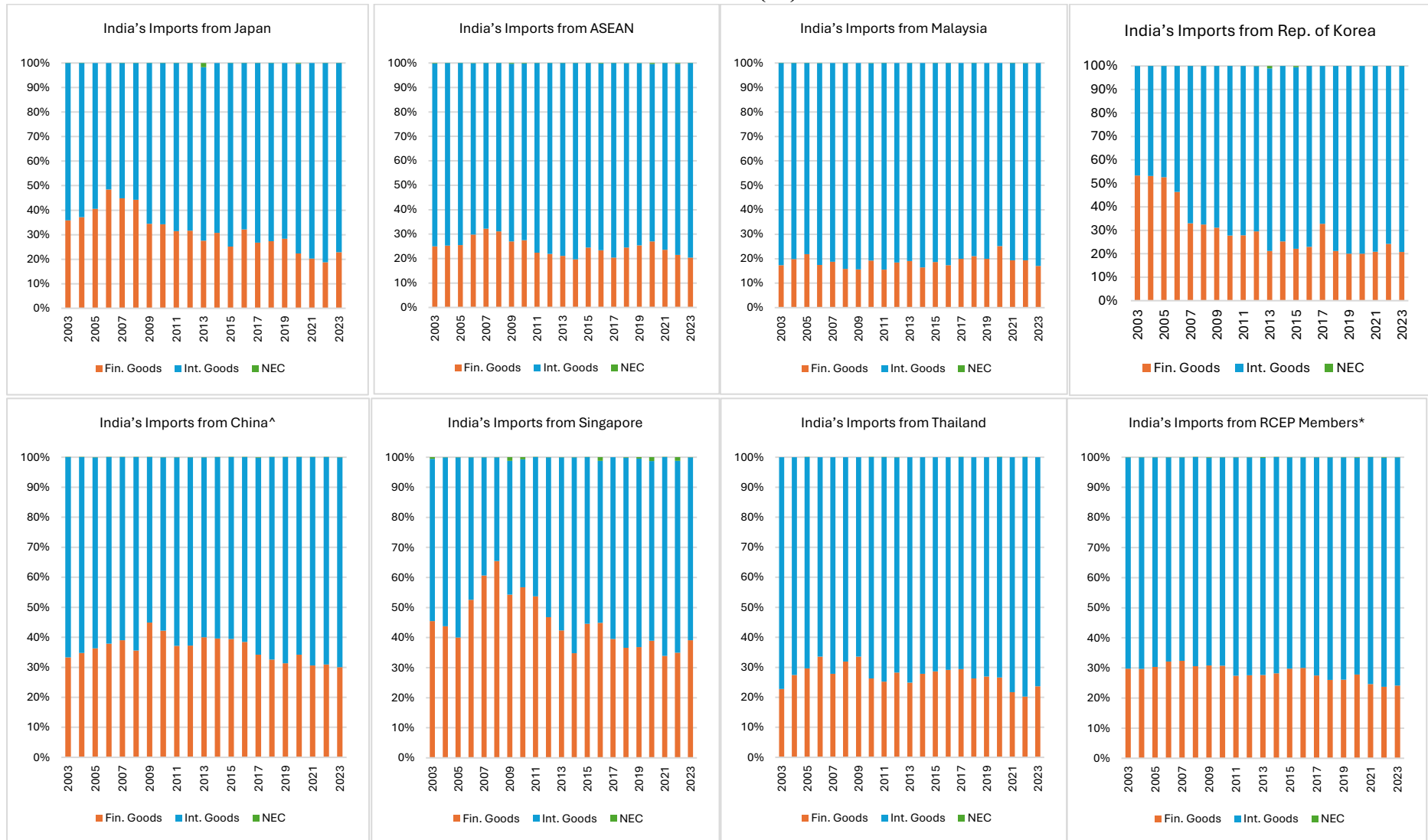
What is the reality behind the trade deficit that constrains further trade reform and, therefore, better linkages with GVCs? In other words, what do the data show? We examine trade data spanning 20 years (2003–2023), coinciding with the period the trade deficit began to widen for India. We explicitly focus on finished versus intermediate goods. We utilise the Broad Economic Classification (BEC) system, version 2002. This system carefully categorises products into intermediate and finished products (encompassing both capital and consumer goods). The BEC system is aligned with the Harmonized System (HS) at the 6-digit level, offering a detailed breakdown of traded goods. Using this classification, we dissect India's trade data to gain valuable insights: do existing or proposed agreements favour a preponderance of specific types of goods from specific partners? Is India primarily exporting intermediate goods whilst importing finished goods? Such analysis can reveal the impact of trade agreements, isolate areas for improvement, and help formulate strategies to enhance trade engagement.

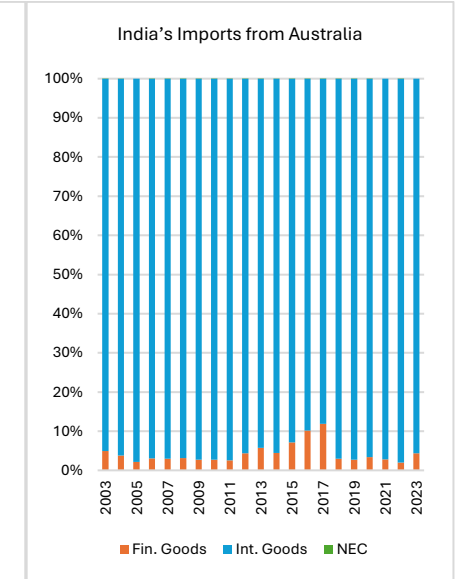
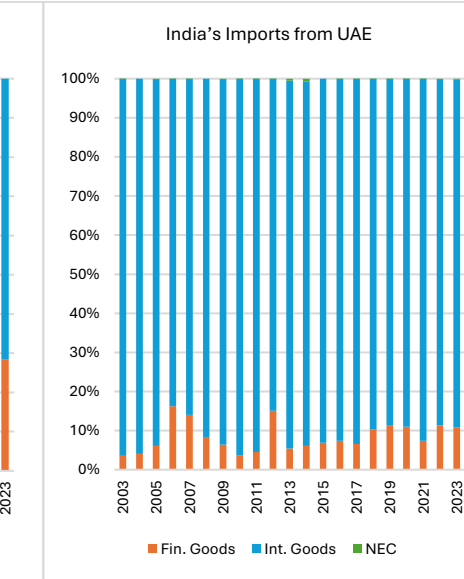
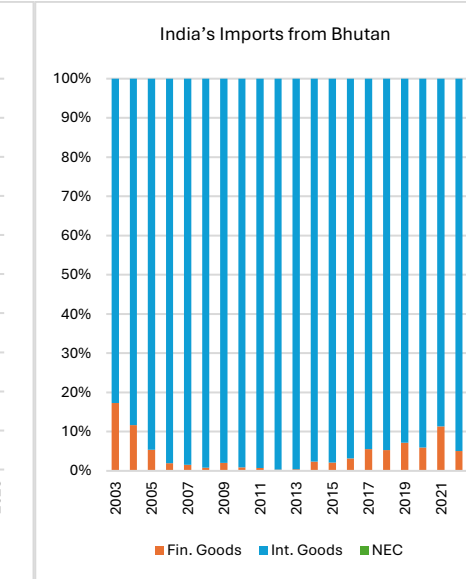
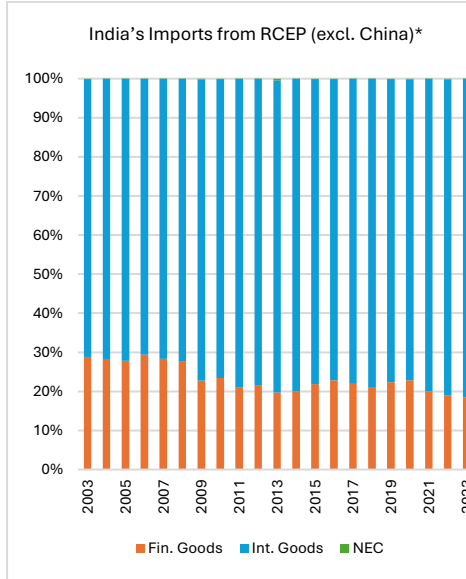
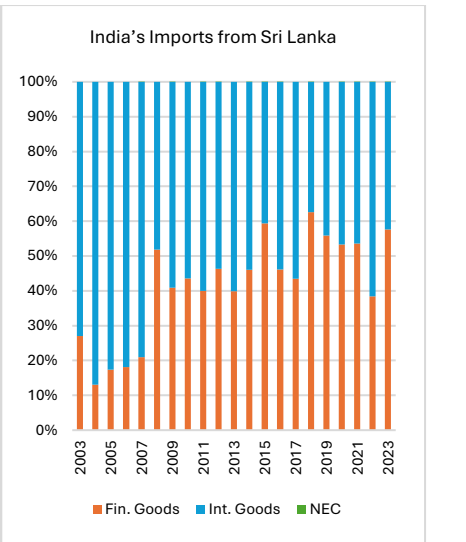
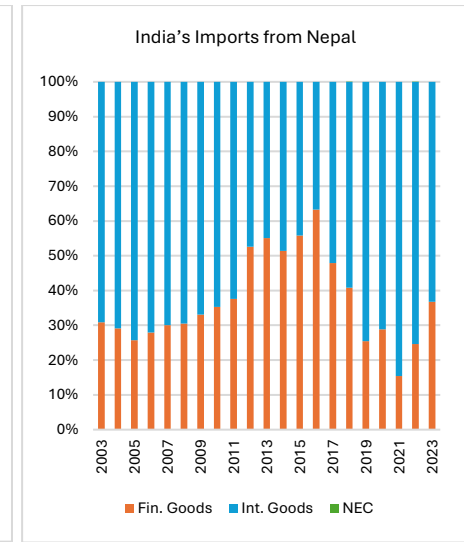
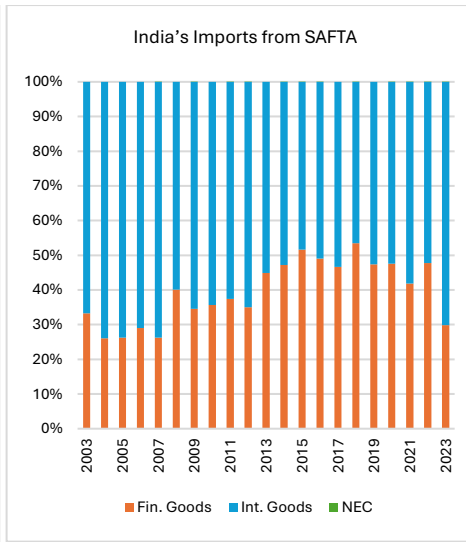
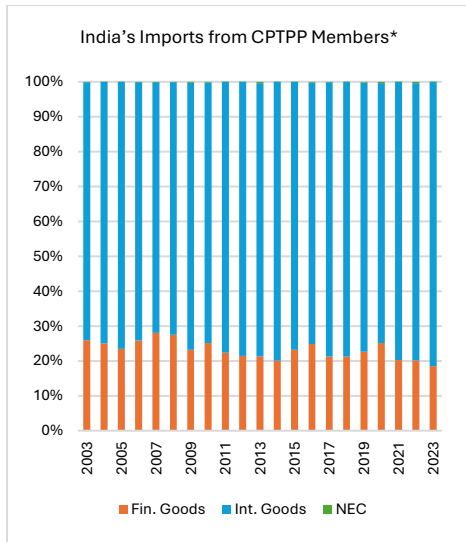
Figure 12 pictorially graphs India's imports from existing and proposed bilateral and regional FTA partners, including China. In the 20 years from 2003, there is a visibly larger share of imports of intermediates. Imports of finished goods are in the range of 20%–40% and are declining for some FTA partners post-COVID-19. Even with China, intermediate goods dominate India's import basket.

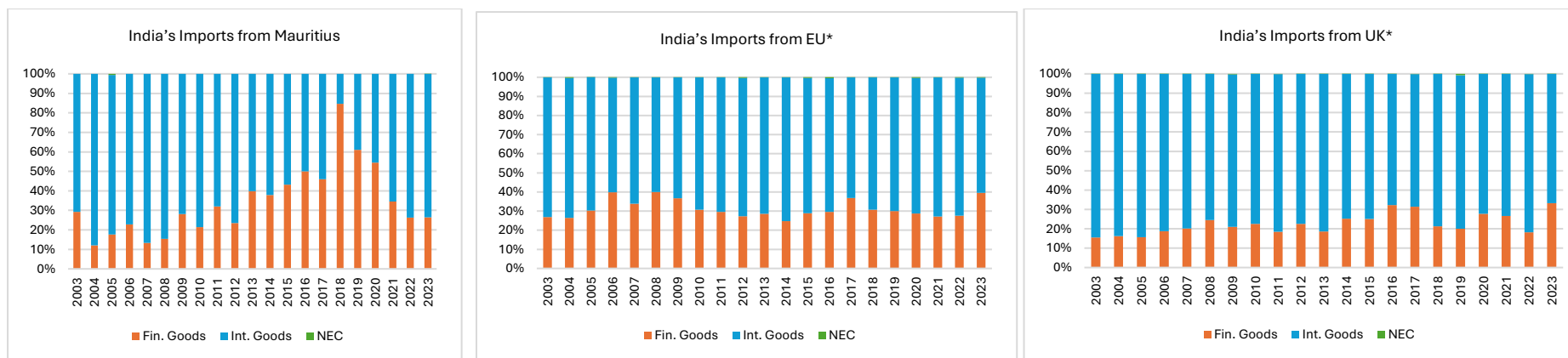
On the other hand, India's exports reveal a different scenario (see Appendix Figure A). There have been greater exports of finished goods to most countries. However, India's intermediate goods exports recently started to rise with East Asian countries, such as Japan, Korea, and China, suggesting increased forward linkages. India's fear of trade agreements is, therefore, puzzling – India is not being treated as a dumping ground for finished goods. Appendix Table A and Figure B further elucidate this fact.

India's imports of intermediate goods from existing and proposed bilateral FTA partners constituted 20% of total imports during this period, whilst the rest came from non-FTA partners, mostly China. In terms of regional agreement partners, only 10% came under the India-ASEAN and India-South Asian Free Trade Area (SAFTA) agreements. The majority of India's imports of intermediate goods come from non-FTA partners (Table 1 and Figure 13(a)). In the case of finished goods, India's imports from bilateral FTAs constitute close to 20%. The share of SAFTA and ASEAN together accounts for 13% (Table 1 and Figure 13(c)).

Figure 12: India's Share of Intermediate and Finished Goods Imports from Existing and Proposed FTA and RTA Partners and China, 2003–2023 (%)







ASEAN = Association of Southeast Asian Nations, CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership, EU = European Union, Fin. Goods = Finished Goods, Int. Goods = Intermediate Goods, NEC = Not Elsewhere Classified, RCEP = Regional Comprehensive Economic Partnership, SAFTA = South Asian Free Trade Area, UAE = United Arab Emirates, UK = United Kingdom.

Notes: * denotes proposed FTA/RTA members; ^ denotes non-FTA members.

Source: World Integrated Trade Solution (WITS) database, World Bank.

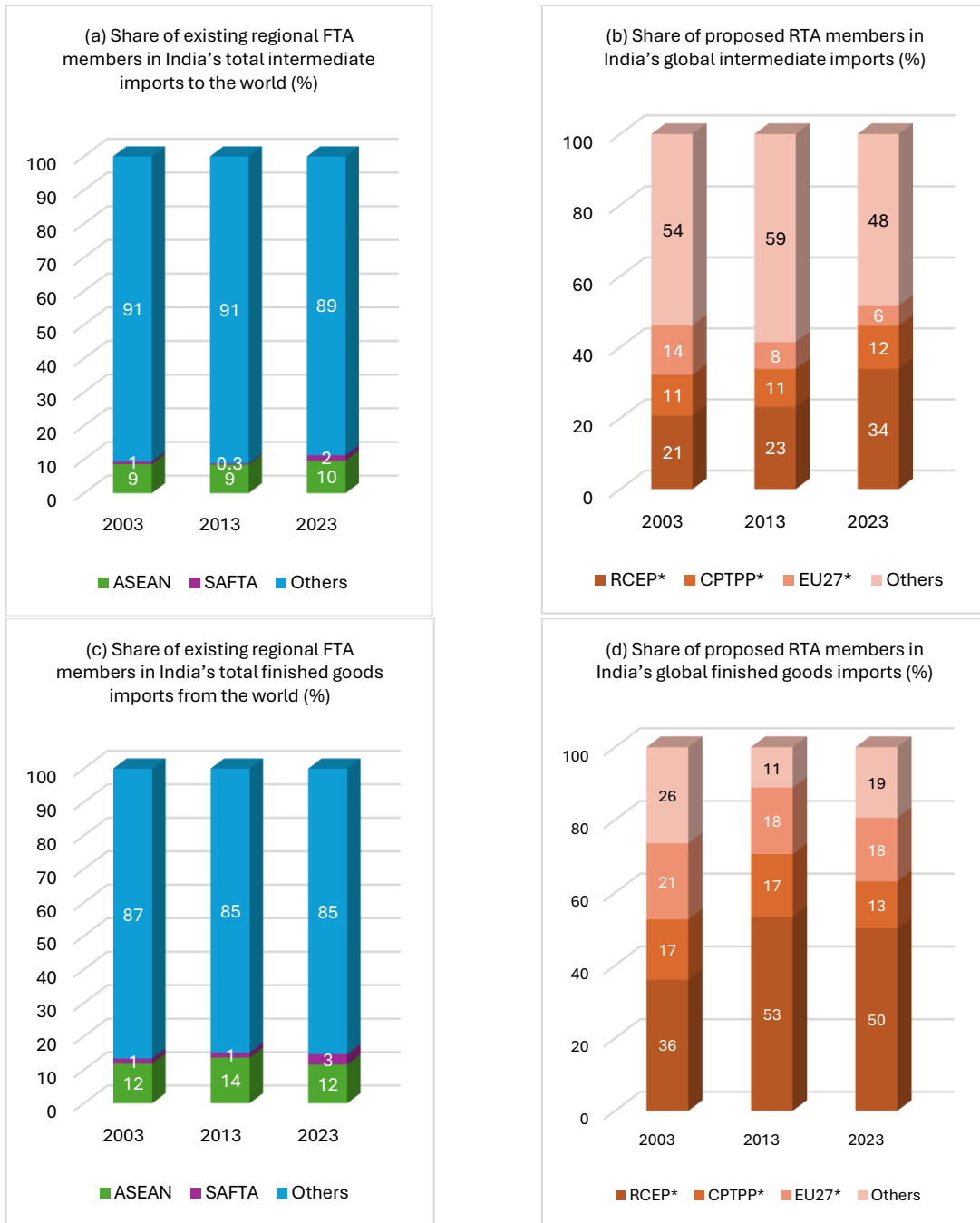
Table 1: Share of India's Existing and Proposed Bilateral FTA Partners in India's Global Intermediate and Finished Goods Imports

FTA Partner	Share in India's Global Intermediate Imports (%)			Share in India's Finished Goods Imports from World (%)		
	2003	2013	2023	2003	2013	2023
Australia	3.4	2.6	3.2	0.7	1.0	0.7
Bhutan	0.1	0.0	0.1	0.1	0.0	0.1
Japan	2.5	1.9	2.6	5.8	4.4	3.6
Rep. of Korea	1.9	2.4	2.8	9.1	4.0	3.4
Malaysia	2.7	1.9	1.9	2.3	2.7	1.8
Mauritius	0.0	0.0	0.0	0.0	0.0	0.0
Nepal	0.3	0.0	0.1	0.6	0.3	0.3
Singapore	1.7	1.0	0.8	6.0	4.6	2.3
Sri Lanka	0.2	0.1	0.1	0.2	0.3	0.4
Thailand	0.7	1.0	1.5	0.9	2.0	2.1
United Arab Emirates	2.5	7.9	6.1	0.4	2.7	3.4
United Kingdom*	4.3	1.3	0.8	3.2	1.8	1.9
Non-FTA partners	79.6	79.7	80.1	70.6	76.2	79.9

Note: * denotes proposed FTA/RTA members.

Source: World Integrated Trade Solution (WITS) database, World Bank.

Figure 13: Shares of Regional Partners (Existing and Proposed) in India's Global Intermediate and Finished Goods Imports



ASEAN = Association of Southeast Asian Nations, CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership, EU = European Union, RCEP = Regional Comprehensive Economic Partnership, SAFTA = South Asian Free Trade Area.

Note: * denotes India's proposed FTA/RTA members.

Source: World Integrated Trade Solution (WITS) database, World Bank.

Interestingly, India's imports of both intermediate and finished goods from RCEP members have increased by about 15 percentage points in the 2 decades since 2003 (Figure 13(b) and (d)). The rise in imports of intermediate goods from RCEP members has shown an increase of 11 percentage points from 2013 to 2023. On the other hand, imports of finished goods from the RCEP group began to decline during this period, as shown in Figure 10.

RTAs like the CPTPP and the India-EU FTA seem to pose almost no worry in the short term or even medium term due to their stable or declining import shares. India's imports of intermediate goods from these countries have been stable at 11%–12% for 20 years; for finished goods, imports during the period 2003–2013 were about 17%, which further declined to 13% in 2023. Notably, India's imports of intermediate goods from the EU have been declining, and in 2023, these were half of what they were in 2003. The share of finished goods from the EU declined by three percentage points during 2003–2013 but has remained stable at 18% since then.

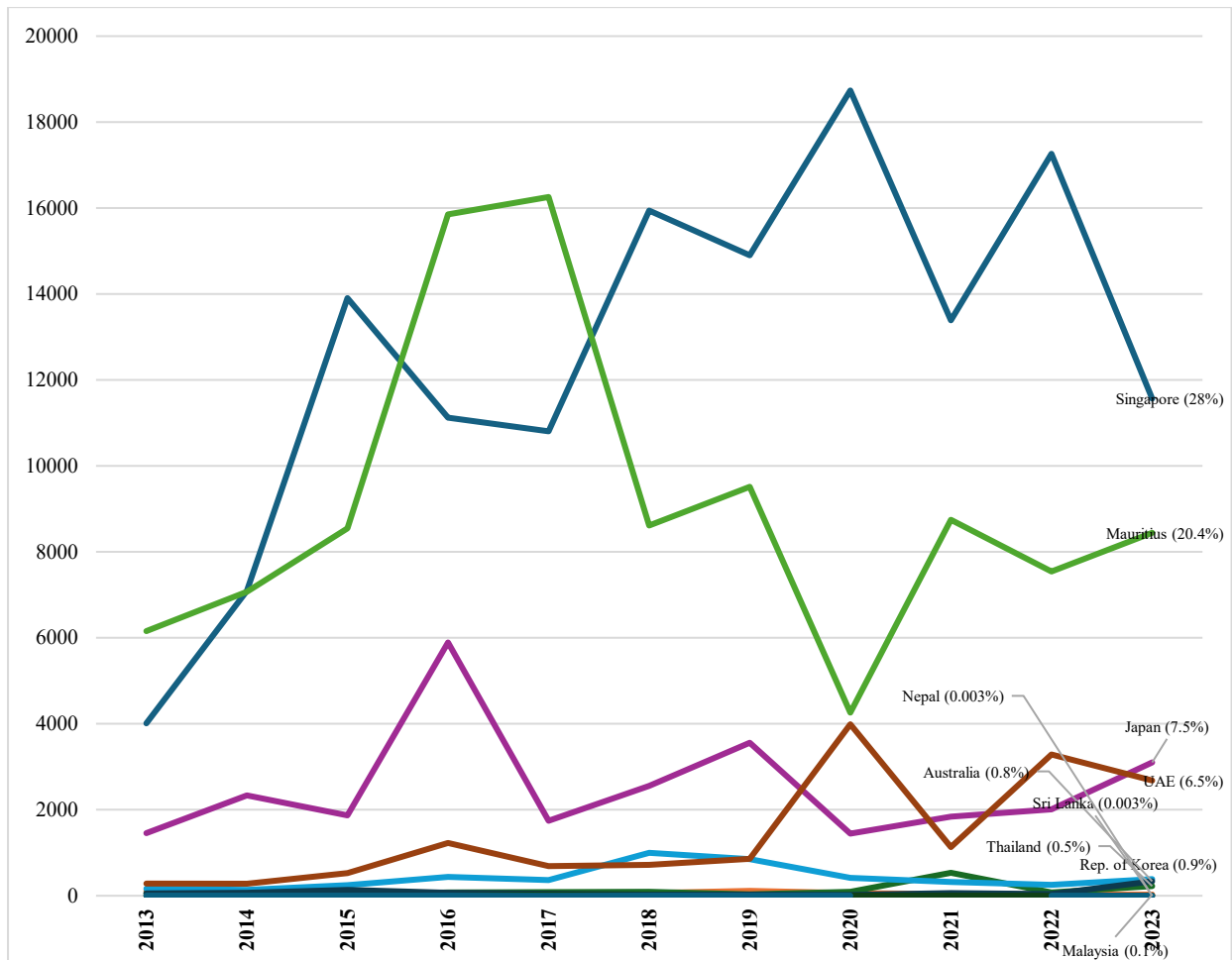
If the three proposed RTAs are signed by India (RCEP, the CPTPP, and India-EU FTA), these will constitute almost 80% of India's total imports of finished goods and more than 50% of imports of intermediate goods (Figure 13(b) and (d)). Therefore, the decision to join any one or more of these agreements must be strategic. India's share of exports to these regional blocs is stable or falling (Appendix Figure B). India's exports of intermediate and finished goods to RCEP member countries currently are around 20% and 15%, respectively, but these shares have declined since 2013. Similarly, in the case of exports to CPTPP member countries, the respective shares are 6% and 11% of intermediate and finished goods. The share of the EU remains stable at around 18% in both categories. Exports to these mega-blocs constitute around 40% of both categories, which are relatively low but offer potential.

If we assess the overall trade balance in only finished goods, India has maintained a trade surplus with many partners, except for a few East Asian countries and Thailand (Figure 15(a)). India's trade deficit in finished goods is the highest with China. From this perspective, existing FTAs have not been significantly detrimental. In the case of regional agreements, too, India has maintained a trade surplus with ASEAN in finished goods (Figure 15(c)).

India's top 10 trading partners are not all FTA partners; China and the US together constitute 25% of India's total trade (Appendix Table B). Thus, FTAs and RTAs are not the reason for perennial overall deficits. As we elaborate in the conclusion, the lack of consistent domestic reform by India, such as in infrastructure development and in attracting FDI inflows the way China did in the past, constrains India from developing linkages with GVCs. Figure 14 shows that India's FDI inflows are only with a few FTA partners like Singapore and

Mauritius, followed by Japan and the UAE. Inflows from Mauritius and the UAE are in services such as finance, real estate, and tourism. India’s manufacturing value chain, thus, has not integrated into partners’ GVCs, which in turn constrains competitiveness and, therefore, export growth, especially in the manufacturing sector.

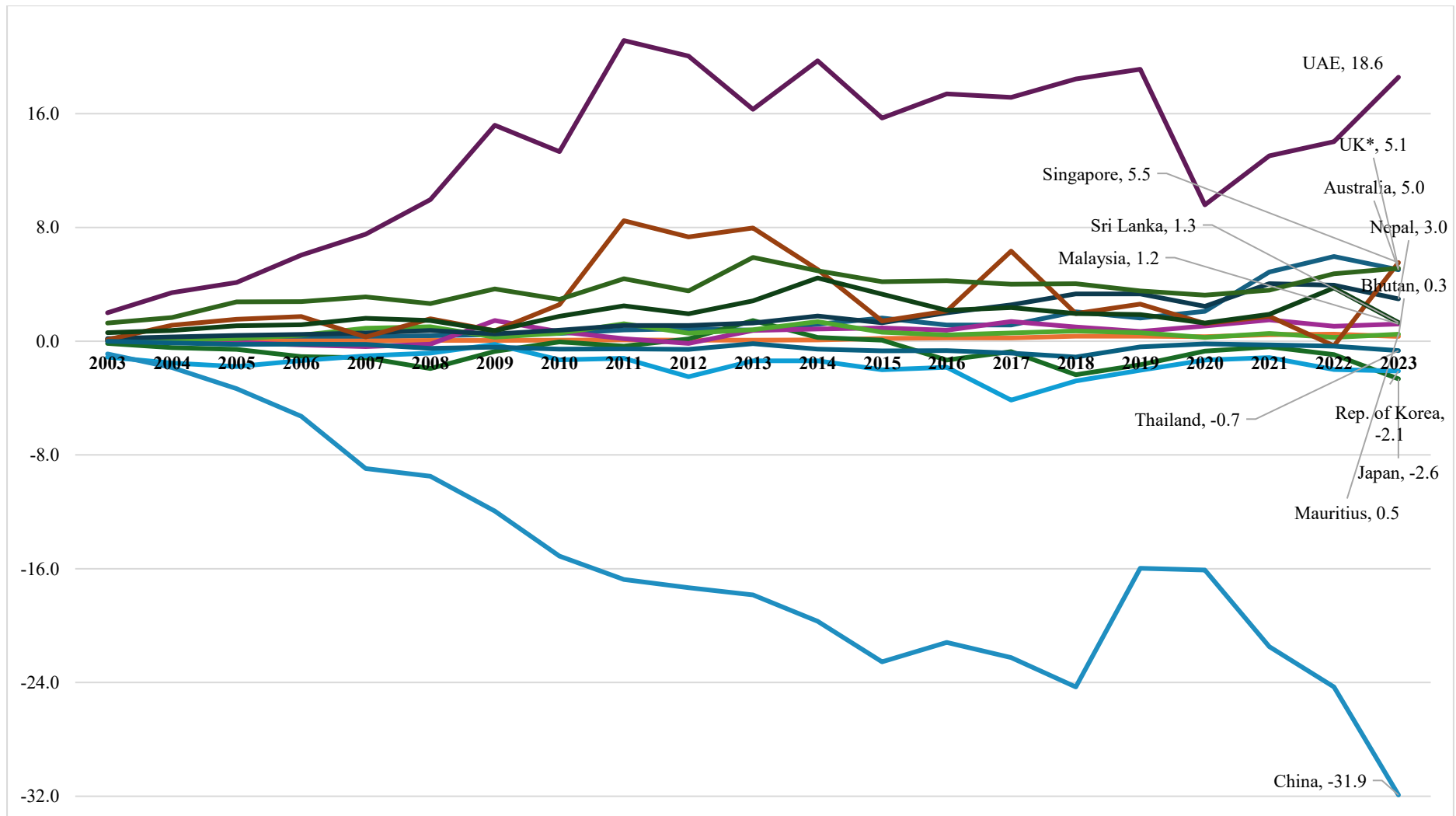
Figure 14: India’s FDI Inflows from Existing Bilateral FTA Partners (US\$ million)



Note: The percentages given in parentheses show the share of the country in India’s total FDI inflows in 2023.

Source: DPIIT FDI Statistics, Government of India.

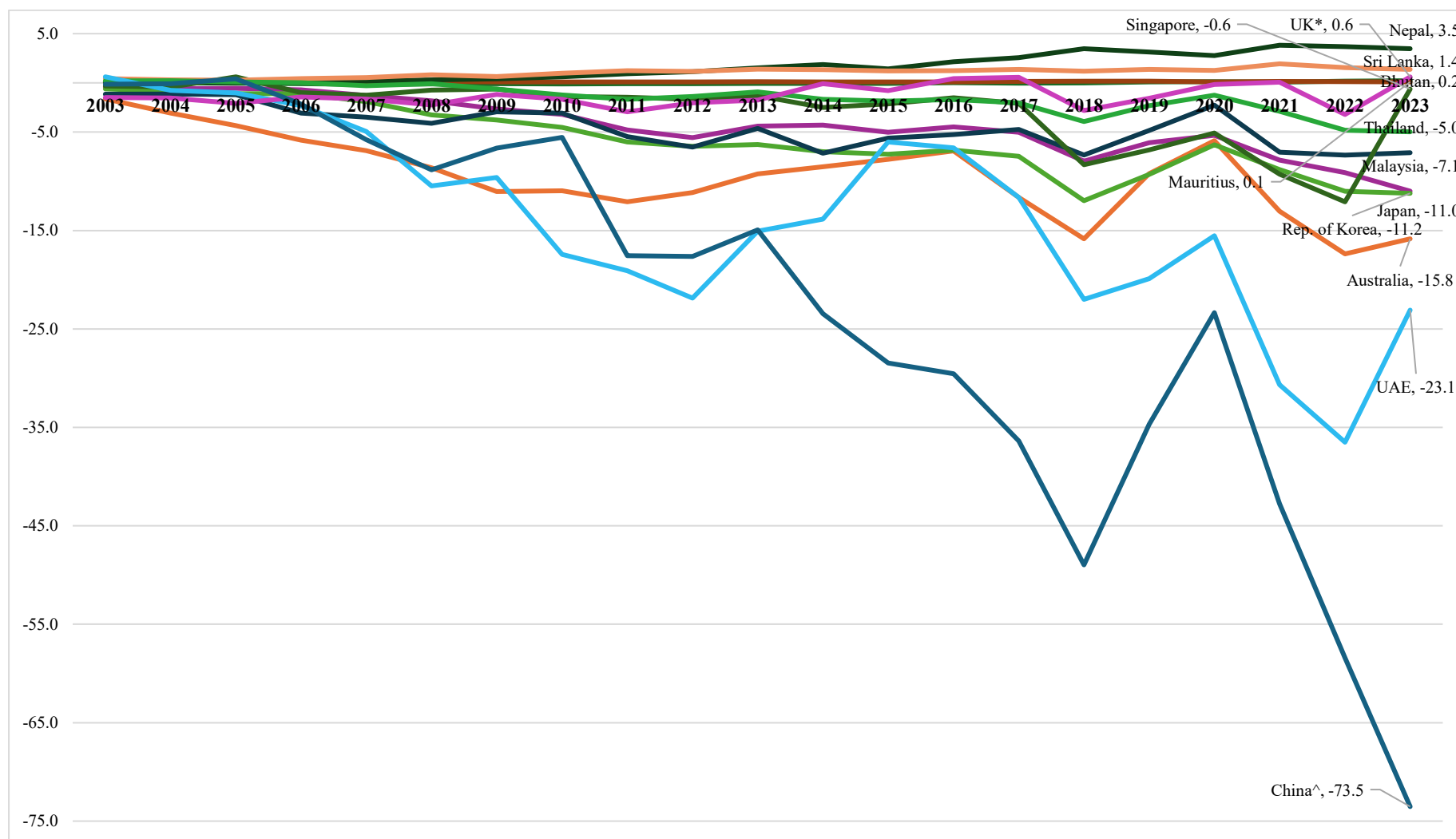
Figure 15(a): India's Trade Balance in Finished Goods with FTA and RTA Members Over 20 Years (US\$ billion)



Note: * denotes India's proposed FTAs/RTAs members.

Source: World Integrated Trade Solution (WITS) database, World Bank.

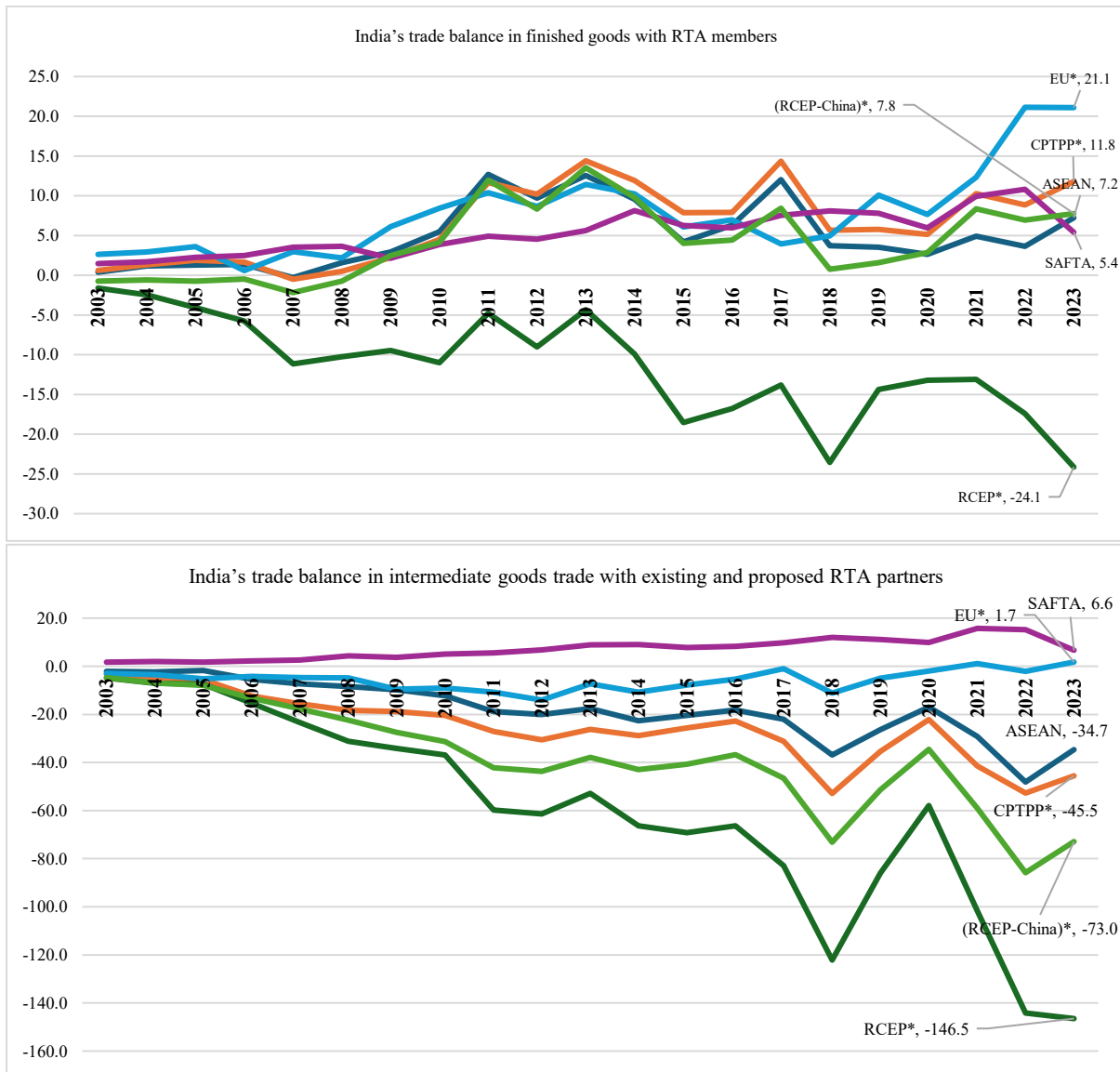
Figure 15(b): India's Trade Balance in Intermediate Goods with FTA and RTA Members Over 20 Years (US\$ billion)



Note: * denotes India's proposed FTAs/RTAs members.

Source: World Integrated Trade Solution (WITS) database, World Bank.

Figure 15(c): India's Trade Balance in Finished and Intermediate Goods with Existing and Proposed Regional Trade Blocs Over 20 Years (US\$ billion)



Note: * denotes India's proposed FTAs/RTAs members

Source: World Integrated Trade Solution (WITS) database, World Bank.

5. India's future trade strategy

Building on the analysis of the trade deficit by category (intermediate and finished goods), and considering that the deficit is less severe with ASEAN countries and manageable with other East Asian nations like Japan and Korea compared to the existing elevated deficit with China, this section examines whether India should join RCEP or the CPTPP, along with a brief look at FTAs with the EU and the UK. We use WITS SMART Simulation results to assess

the effect on India’s overall exports and imports if it joins RCEP, CPTPP, and other proposed FTAs and RTAs.

The SMART Simulation used in this paper assumes a scenario in which all import tariffs are eliminated if India joins the agreements (zero-duty scenario). In this model, the ‘importer column’ can take only one country at a time. The results for India’s imports from RCEP and the CPTPP are thus obtained for the grouping as a whole. Exports to RCEP and the CPTPP are calculated as the sum of India’s exports to each member country, which will be the same irrespective of the RTA. Despite these limitations, the estimated change in exports for India, if it joins any of the proposed agreements, can provide some insights. WITS trade data are available until 2023, although the simulation model is available only until 2021.

The simulation model estimates the total trade effect (TTE) in addition to existing imports or exports.

TTE is equal to the sum of trade creation (TC) and trade diversion (TD). Note that TC refers to new imports from RTA partners, whilst TD is the case when imports would be diverted from other countries and imported from FTA partners (who are now considered as the cheaper source of imports for India).

Table 2: WITS SMART Simulation Summary Results: Effect on India’s Imports and Exports if It Joins the Proposed Mega RTAs

If India Joins:	<i>Simulation Results for India’s Imports from RTA/FTA Members (US\$ billion)</i>					Change in India’s Imports (%)
	India’s Imports from Members	Total Trade Effect (TC+TD)	Trade Creation (TC)	Trade Diversion (TD)	Estimated Imports of India After Entering into FTA/RTA	
RCEP	199.3	32.0	28.2	3.8	231.3	16.0
CPTPP	78.4	6.9	4.6	2.3	85.3	8.8
India-UK FTA	6.7	3.2	0.0	2.5	9.9	47.4
India-EU FTA	45.9	16.4	12.5	3.9	62.3	35.7
If India Joins:	<i>Simulation Results for India’s Exports to RTA/FTA Members (US\$ billion)</i>					Change in India’s Exports (%)
	India’s Exports to Members	Total Trade Effect (TC+TD)	Trade Creation (TC)	Trade Diversion (TD)	Estimated Exports of India After Entering into FTA/RTA	
<i>RCEP*</i>	87.0	5.3	3.5	1.8	92.3	6.1
<i>CPTPP*</i>	46.6	3.6	2.3	1.3	50.3	7.8
<i>India-UK FTA</i>	10.4	0.4	0.20	0.22	10.8	4.0
<i>India-EU FTA</i>	59.0	3.0	1.46	1.49	61.9	5.0

Note: * denotes that the ‘importer column’ in the simulation analysis can take only one country at a time and not RCEP/CPTPP; thus, India’s exports to RCEP and the CPTPP are calculated as the sum of its exports to each member country, which will be the same irrespective of the RTA.

Source: Authors’ estimates.

The key findings are that in the case of RCEP, more new trade (i.e. new imports) would be added for India (Table 2). That is, RCEP membership could lead to a substantial rise in India's imports, with China being the primary beneficiary (Table 3(a) and Figure 16). Over 75% of the import increase (roughly US\$25 billion) is likely to originate in China, followed by a 14% increase in imports from ASEAN (US\$5 billion). Conversely, India's export gains are projected to be much lower, with a modest 2%–3% increase expected for both China and ASEAN (Table 3(b), Figure 16). Nonetheless, China would still be able to capture nearly 60% of India's overall export increase under RCEP, as per the simulation results.

Table 3(a): India's Existing and Estimated Imports from Each RCEP Member After Joining the RCEP Agreement

RCEP Member	Value (US\$ billion)		Change in India's Imports (%)
	India's Imports in 2021	Estimated Imports of India After Joining RCEP	
China	87.54	112.27	28.3
Singapore	18.20	18.75	3.0
Rep. of Korea	17.08	17.90	4.8
Indonesia	16.72	18.04	7.9
Australia	15.10	16.18	7.1
Japan	14.41	15.06	4.5
Malaysia	12.09	13.08	8.2
Thailand	8.67	9.91	14.3
Viet Nam	7.08	7.54	6.6
Myanmar	0.80	0.81	1.4
Philippines	0.73	0.75	2.6
Brunei Darussalam	0.47	0.50	5.4
New Zealand	0.37	0.46	24.0
Cambodia	0.076	0.076	0.3
Lao PDR	0.000853	0.000845	-0.9
<i>ASEAN countries</i>	<i>64.84</i>	<i>69.45</i>	<i>7.10</i>
<i>RCEP (excl. China)</i>	<i>111.80</i>	<i>119.05</i>	<i>6.48</i>

Source: Authors' estimates.

Table 3(b): India's Existing and Estimated Exports to Each RCEP Member After Joining the RCEP Agreement

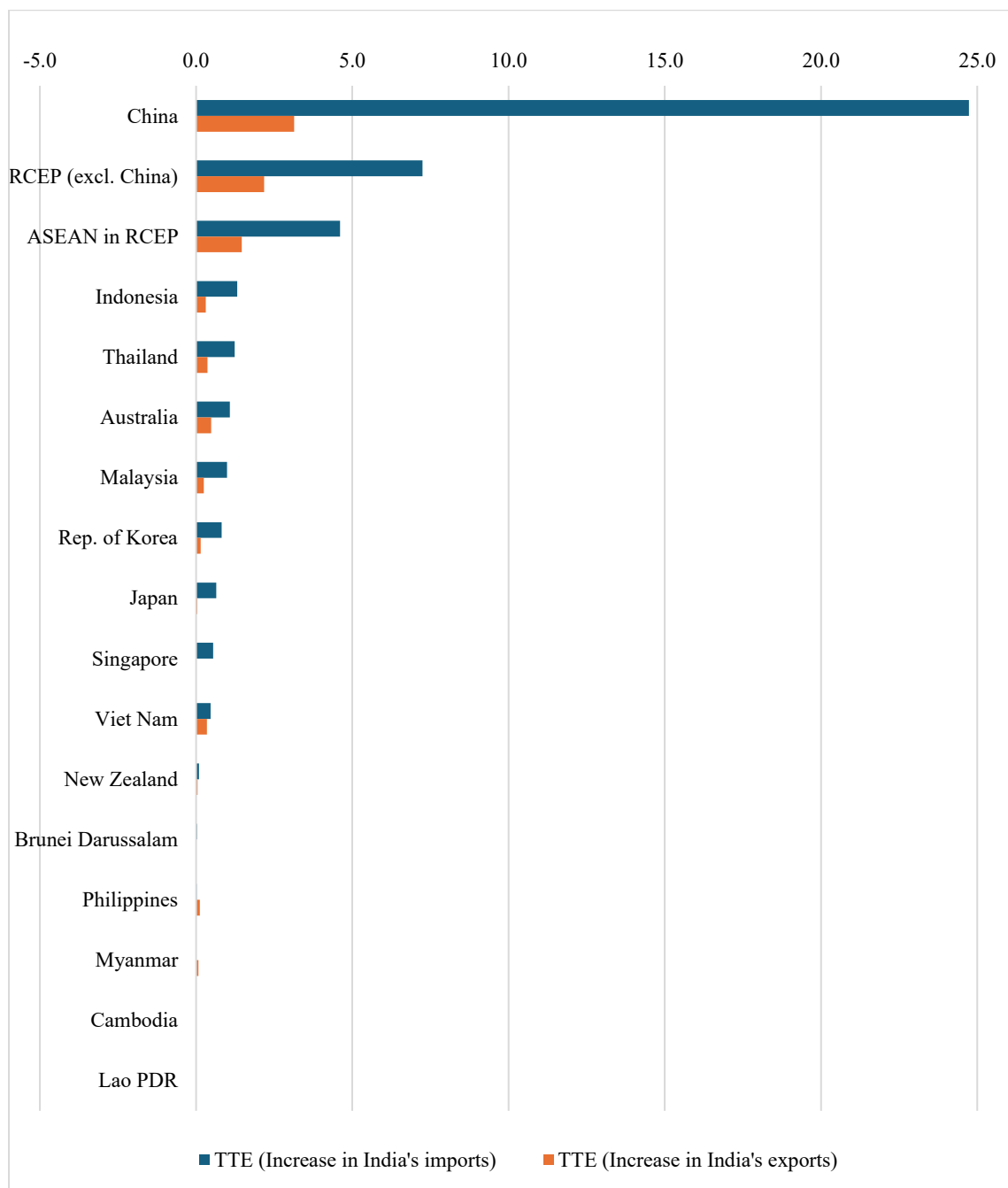
RCEP Member	Value (US\$ billion)		Change in India's Exports (%)
	India's Exports in 2021	India's Estimated Exports After Joining RCEP	
China	28.12	31.26	11.16
Singapore*	7.36	7.36	0.00
Rep. of Korea	8.06	8.21	1.89
Indonesia	7.67	7.98	4.03
Australia	6.37	6.85	7.61
Japan	6.15	6.19	0.69
Malaysia	5.92	6.17	4.14
Thailand	6.41	6.77	5.59
Viet Nam	6.95	7.29	4.97
Myanmar	0.57	0.65	12.86
Philippines	2.39	2.51	5.04
Brunei Darussalam	0.06	0.06	0.03
New Zealand	0.70	0.75	6.46
Cambodia	0.19	0.19	1.34
Lao PDR	0.04	0.042	3.21
<i>ASEAN countries</i>	<i>37.56</i>	<i>39.02</i>	<i>3.90</i>
<i>RCEP (excl. China)</i>	<i>58.84</i>	<i>61.02</i>	<i>3.71</i>

Note: * denotes no change in exports for Singapore post-CPTPP.

Source: Authors' estimates.

The results suggest that India's new exports to RCEP members are likely to be significantly lower than the import increase, creating a significant trade gap for India, with imports far outpacing potential exports. The same result holds even if we exclude China from the simulation.

Figure 16: Increase in India's Imports from and Exports to RCEP Members After Joining the RCEP Agreement (US\$ billion)



TTE = total trade effect.

Source: Authors' estimates.

Table 4: Increase in India's Imports from and Exports to RCEP Members

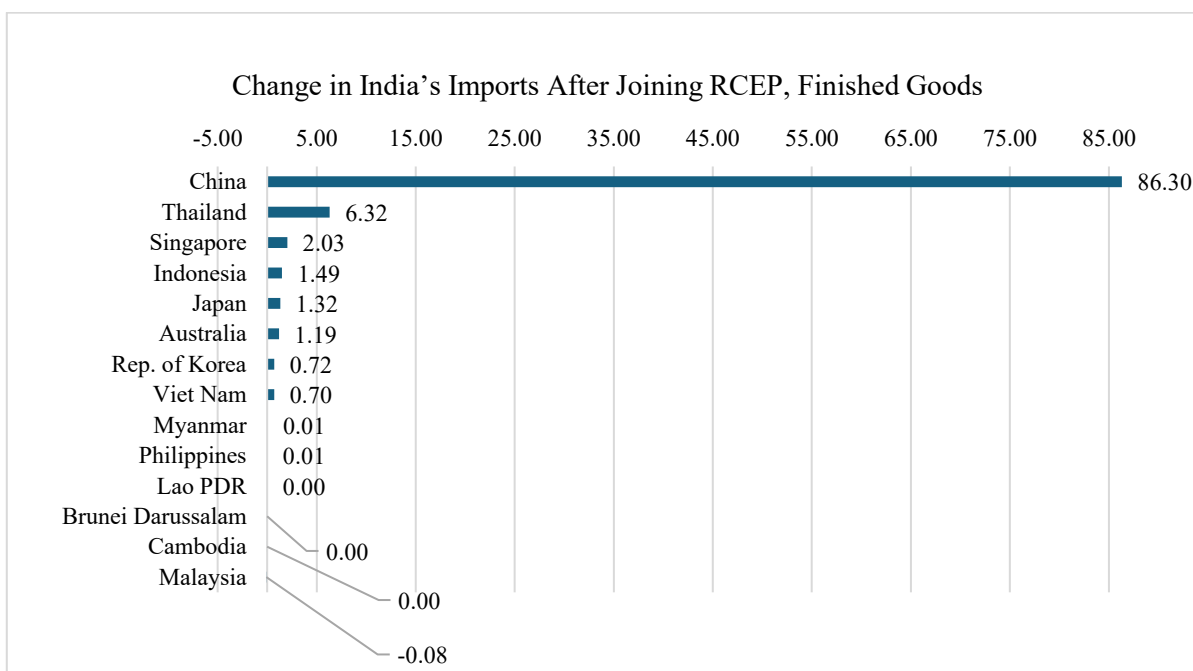
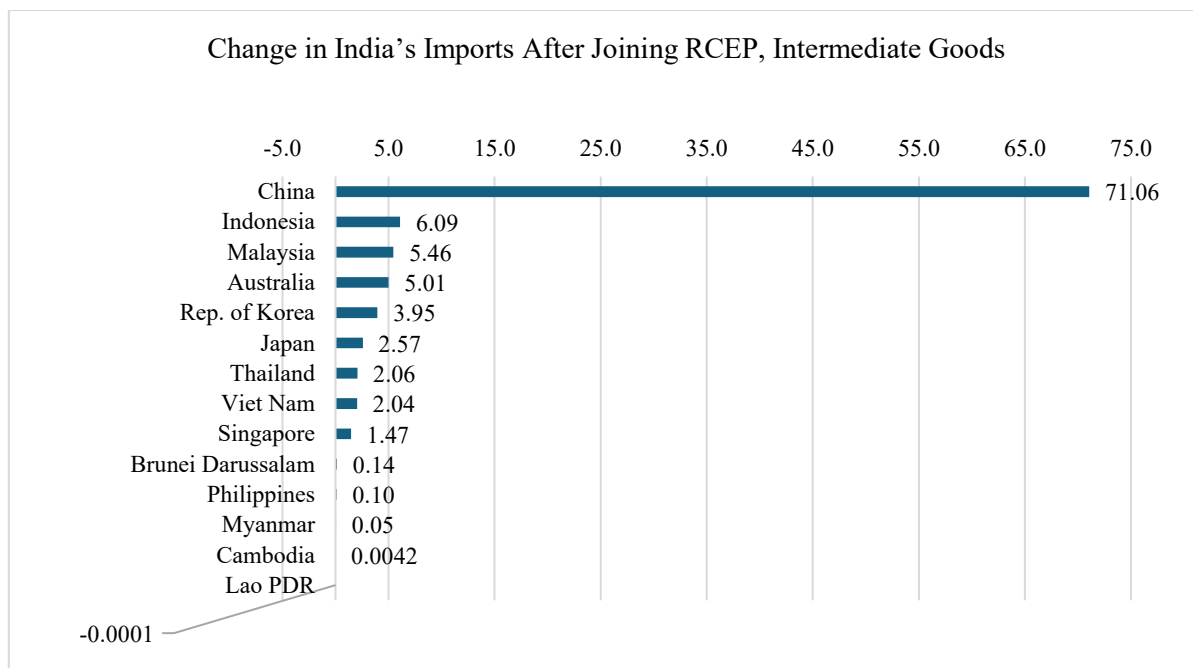
RCEP Member	Share of Country in estimated TTE (i.e., change in India's imports post-RCEP, %)	No. of Products with Changes in Imports	Intermediate Goods	Finished Goods
China	77.57	3,617	2,313	1,304
Indonesia	4.13	1,518	954	564
Thailand	3.88	2,180	1,329	851
Australia	3.38	1,431	839	592
Malaysia	3.10	1,988	1,170	818
Rep. of Korea	2.57	2,436	1,559	877
Japan	2.04	2,834	1,794	1,040
Singapore	1.71	2,678	1,650	1,028
Viet Nam	1.47	1,485	875	610
Brunei Darussalam	0.08	28	22	6
Philippines	0.06	670	405	265
Myanmar	0.03	230	66	164
Cambodia	0.001	226	66	160
Lao PDR	-0.00002	14	10	4
Total number of products affected in India after joining RCEP		21,335	13,052	8,283

TTE = total trade effect.

Source: Authors' estimates.

Further disaggregation of the results shows that India's imports are projected to be roughly 60% more in intermediate goods, with China being the source for over 70% of these (Table 4, Figure 17), whilst the remaining 40% of the import increase in finished goods will also be dominated by China (85%). China's preoccupation looms large for India's trade engagement with or without an FTA.

Figure 17: Projected Increase in India's Imports from RCEP Members by Category (%)

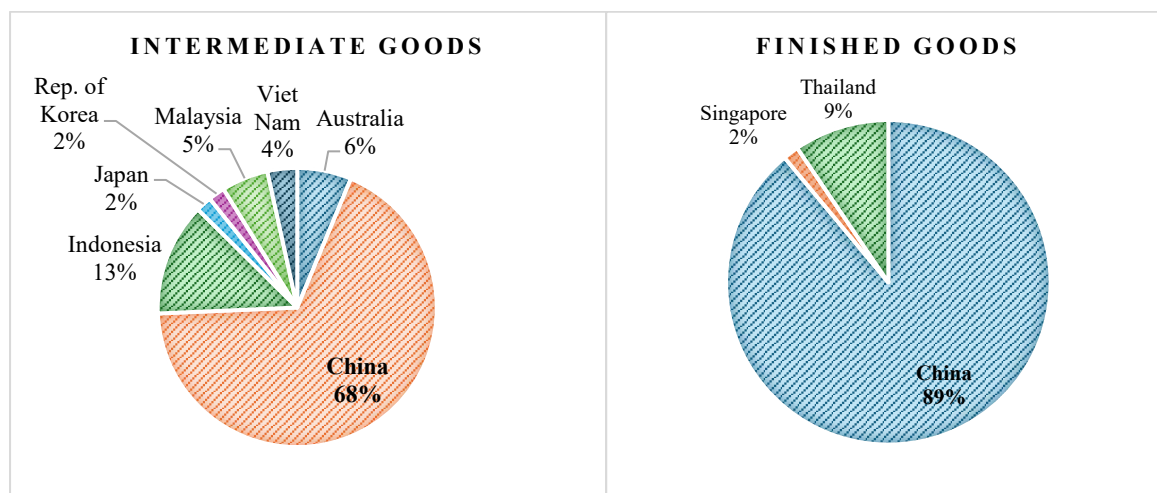


Source: Authors' estimates.

Whilst more than 21,000 Indian tariff lines (6-digit-level products) could be impacted by RCEP membership, a closer look reveals a concentration of economic effects. The top 50 most-imported items under these tariff lines, valued at a substantial US\$15.6 billion (almost 50% of the total cost), represent a microcosm of the potential changes. Notably, China dominates this group with a 78% share, followed by Indonesia (7%), Thailand (5%), and

Australia and Malaysia (each at 3%). Interestingly, 22 out of these top 50 items are finished goods, suggesting China could become a major exporter of these products to India (Figure 18 and Appendix Table C).

Figure 18: Projected Change in India’s Imports for the Top 50 Items (Intermediate and Finished) After Joining RCEP



Source: Authors’ estimates.

The top 50 items for which exports from China and other countries to India are likely to rise post-RCEP are listed in Appendix Table C. The list shows that the majority of the items relate to electric machinery/electronics and general machinery.

Unlike RCEP, joining the CPTPP is predicted to have a more balanced trade effect for India (Table 2). Whilst imports would increase, primarily from ASEAN countries (contributing 48%, or approximately US\$3.2 billion – followed by US\$1 billion each from Australia and Japan), there is also potential for export growth (Table 5(a) and Figure 19). Notably, India’s export gains could be significant; exports will increase by US\$1 billion or more for Mexico, followed by Canada and Australia. However, exports to ASEAN are likely to increase by only US\$600 million, or around 16% of the overall trade effect (Table 5(b)). In fact, India’s overall trade impact with CPTPP members appears less skewed towards imports compared to RCEP.

Table 5(a): India's Existing and Estimated Imports from Each CPTPP Member After Joining the CPTPP Agreement

CPTPP Member	Value (US\$ billion)		Change in India's Imports (%)
	India's Imports in 2021	India's Estimated Imports After Joining the CPTPP	
Singapore	18.2	19.1	4.7
Australia	15.1	16.2	7.0
Japan	14.4	15.4	6.9
Malaysia	12.1	13.7	13.1
Viet Nam	7.1	7.9	12.1
Mexico	4.1	4.3	4.7
Peru	2.6	3.3	24.5
Canada	2.7	3.1	14.9
Chile	1.2	1.44	18.0
Brunei Darussalam	0.5	0.50	6.5
New Zealand	0.4	0.46	23.7
<i>ASEAN countries</i>	<i>37.8</i>	<i>41.2</i>	<i>8.8</i>

Source: Authors' estimates.

Table 5(b): India's Existing and Estimated Exports to Each CPTPP Member After Joining the CPTPP Agreement

CPTPP Member	Value (US\$ billion)		Change in India's Exports (%)
	India's Exports in 2021	India's Estimated Exports After Joining the CPTPP	
Singapore*	7.4	7.4	0.0
Australia	6.4	6.9	7.6
Japan	6.1	6.2	0.7
Malaysia	5.9	6.2	4.1
Viet Nam	6.9	7.3	5.0
Mexico	5.9	7.6	28.5
Peru	1.1	1.2	5.5
Canada	4.8	5.4	12.0
Chile	1.3	1.4	11.9
Brunei Darussalam	0.1	0.1	0
New Zealand	0.7	0.7	6.5
<i>ASEAN countries</i>	<i>20.3</i>	<i>21.00</i>	<i>2.96</i>

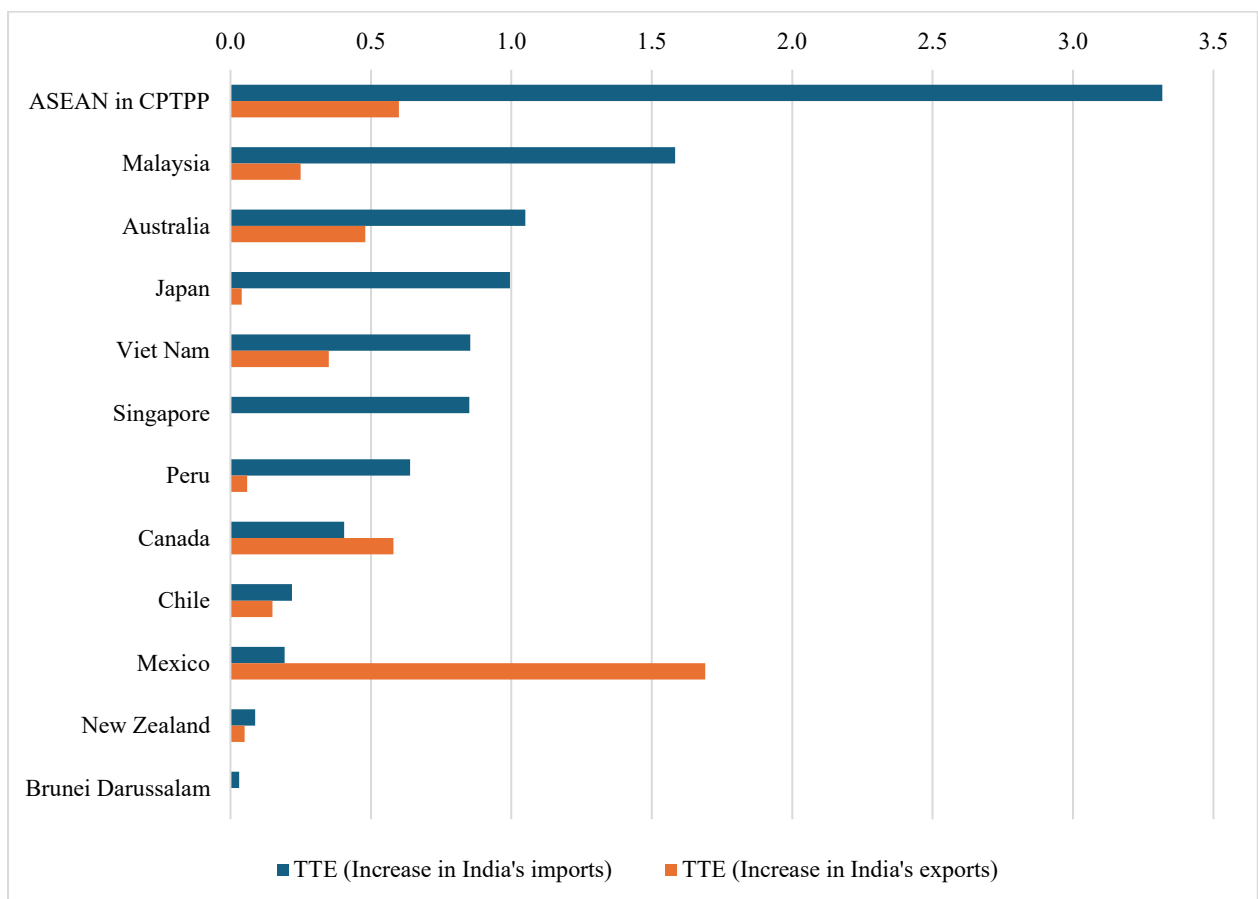
Note: * denotes no change in exports for Singapore post-CPTPP.

Source: Authors' estimates.

Overall, the analysis suggests that if India joins the CPTPP, its imports from ASEAN, Japan, and to some extent, Peru are likely to be significantly higher than its exports. However, India's exports have the potential to increase to advanced economies, including Canada and Australia. Intermediate goods account for about 62% of the total products for which imports are likely to increase for India after joining CPTPP (Table 6). The increase in imports of intermediate goods is modest (worth US\$5.4 billion) compared to the potential high increase

of US\$18 billion under RCEP. Similarly, imports of finished goods are expected to rise by US\$1.5 billion under CPTPP, compared to a higher increase of US\$14 billion under RCEP. Importantly, unlike RCEP, where benefits would be concentrated heavily on China, the increase in imports under the CPTPP is likely to be distributed more evenly amongst partners in ASEAN, Japan, Australia, and North American economies (Figures 20 and 21). This suggests that joining the CPTPP could be a more beneficial trade agreement for India compared to RCEP, even in terms of expanding its existing regional and global value chains.

Figure 19: Increase in India’s Imports from and Exports to CPTPP Members After Joining the CPTPP Agreement (US\$ billion)



TTE = total trade effect.
 Source: Authors’ estimates.

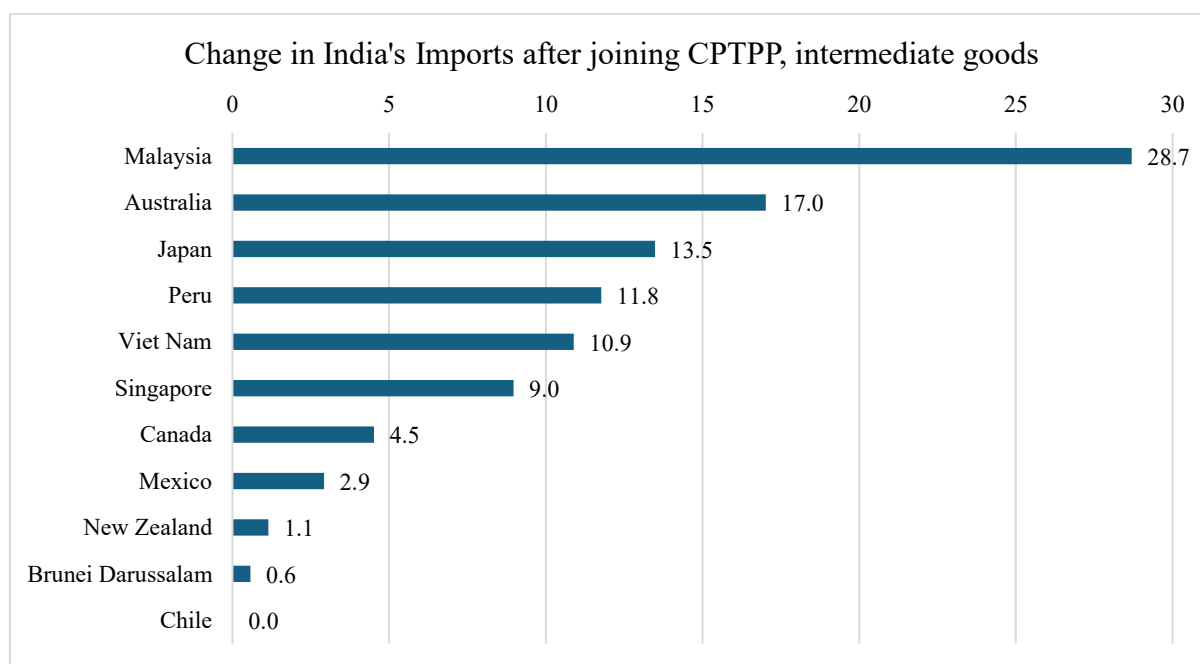
Table 6: Increase in India's Imports from and Exports to CPTPP Members

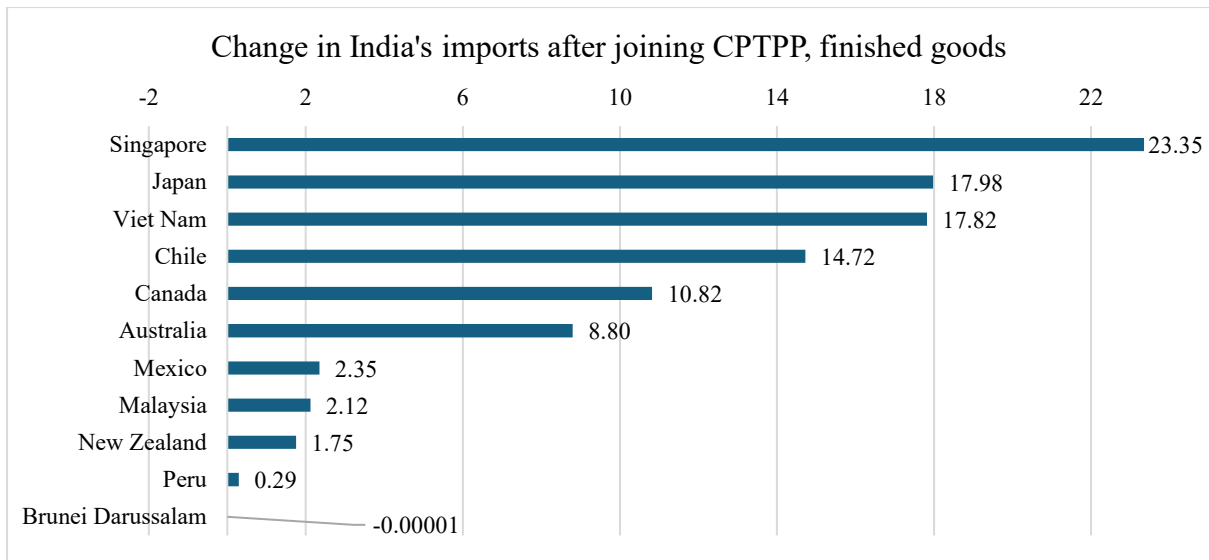
CPTPP Member	Share of Country in TTE for India (i.e., change in India's imports post CPTPP, %)	No. of Products (6-digit) with Changes in Imports	Intermediate Goods	Finished Goods
Malaysia	23.0	1,989	1,170	818
Australia	15.2	1,431	839	592
Japan	14.4	2,834	1,794	1,040
Viet Nam	12.4	1,486	875	610
Singapore	12.1	2,682	1,650	1,028
Peru	9.3	191	141	50
Canada	5.9	1,563	1,013	547
Chile	3.2	237	153	84
Mexico	2.8	830	564	266
New Zealand	1.3	470	281	188
Brunei Darussalam	0.4	28	22	6
<i>No. of tariff lines for India likely to be affected after joining the CPTPP</i>		13,741	8,502	5,229

TTE = total trade effect.

Source: Authors' estimates.

Figure 20: Projected Increase in India's Imports from CPTPP Members by Category (%)

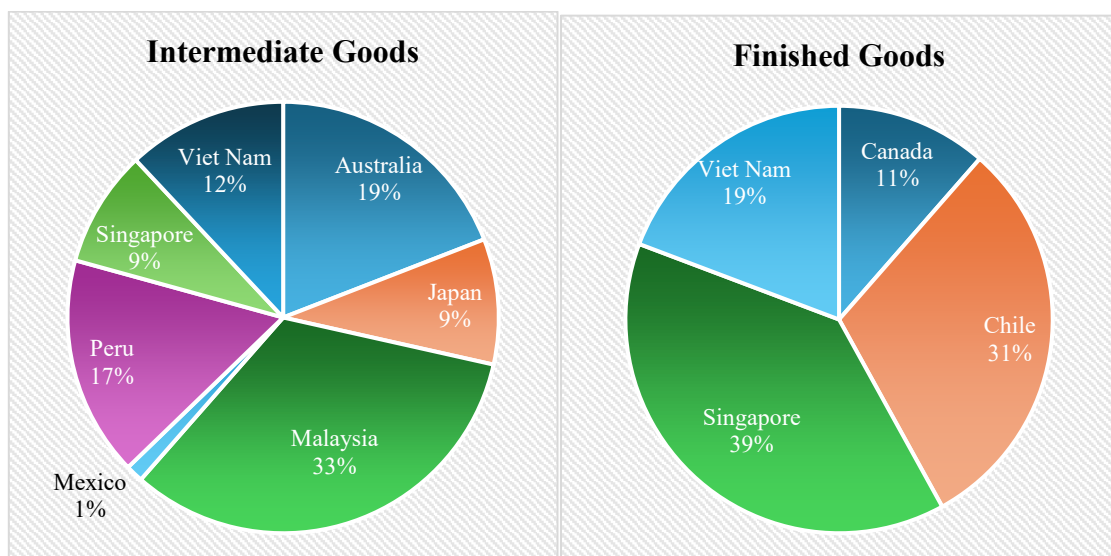




Source: Authors' estimates.

Of the more than 13,000 Indian tariff lines whose imports could be affected by the CPTPP, the top 30 items account for 62% (US\$4.3 billion) of the total imports. These top 30 items include 24 intermediate goods, which suggests that prospects for creating backward GVC linkages are promising. Although the number of products is large, the value embedded in these items is small (see Appendix Table D).

Figure 21: Projected Change in India's Imports for Top 30 Items (Intermediate and Finished) After Joining the CPTPP



Source: Authors' estimates.

Further, India’s exports to the UK will increase by only US\$400 million after joining the India-UK FTA. Although US\$3 billion of new imports will be created for India, it is likely to sustain a trade surplus (Table 2). The agreement is likely to see a larger increase in imports, particularly for automotive products. India’s new imports from the EU are projected to reach US\$16 billion, compared to a US\$3 billion rise in exports (Table 2). However, this impact may be mitigated as India already has relatively higher exports to the EU. Germany, Belgium, and Italy could see increased exports to India (Table 7).

Table 7: Potential Increase in India’s Imports (Total Trade Effect) After Joining the India-EU FTA

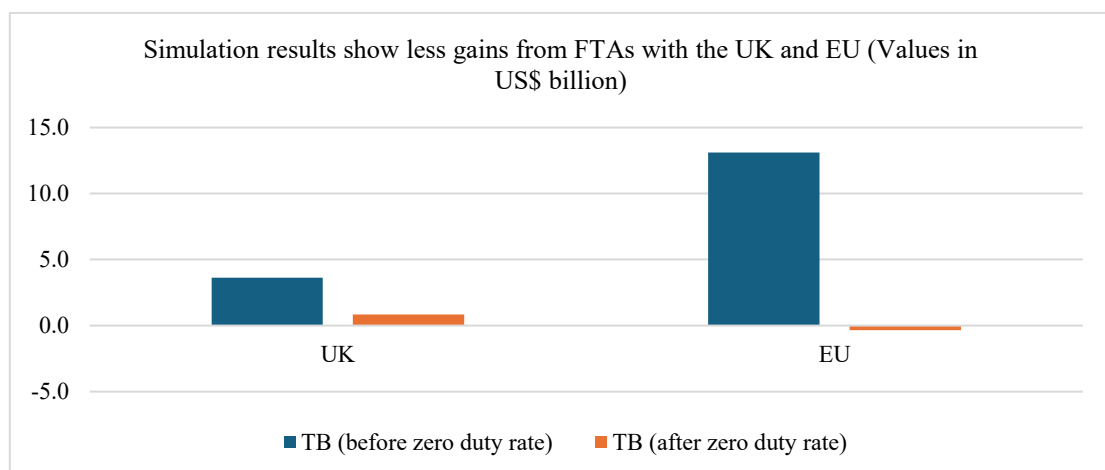
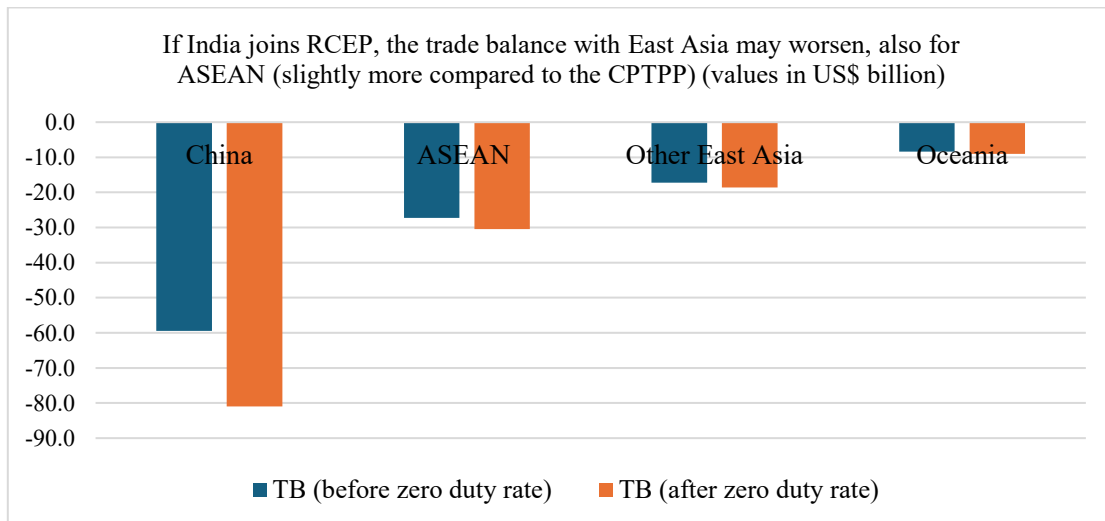
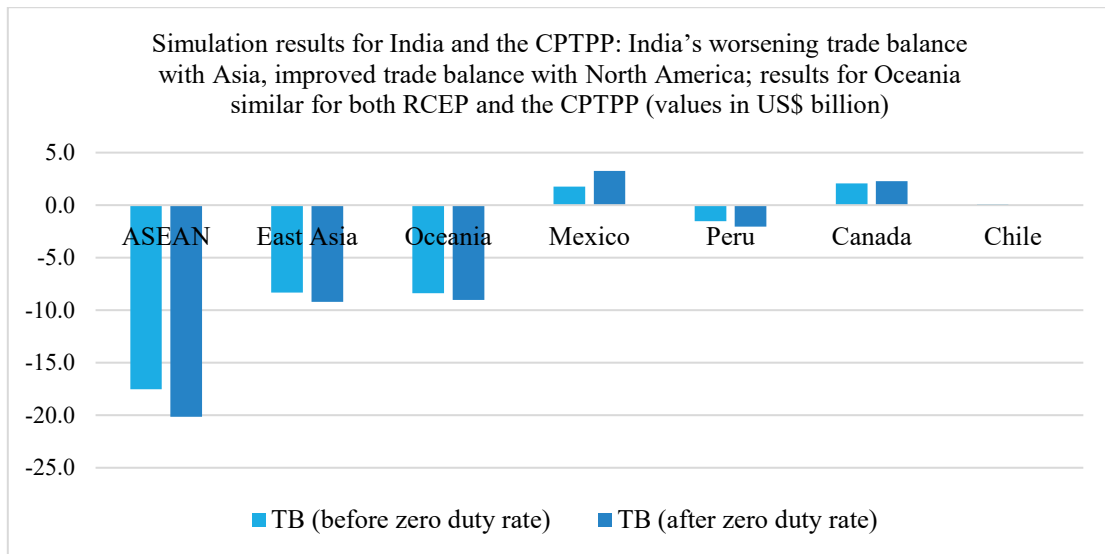
Members with New Imports of Over US\$1 Billion Created for India	Total Trade Effect (US\$ billion)
Germany	5.07
Belgium	3.10
Italy	2.69
France	1.09
Netherlands	1.01
Poland	0.29
Portugal	0.06

Source: Authors’ estimates.

To summarise, signing the proposed FTAs/RTAs, on average, is likely to have an adverse impact on India’s trade balance (Figure 22). This outcome could conflict with the objectives of initiatives like ‘Make in India for the World’ and the Production Linked Incentive (PLI) scheme, which aim to increase domestic value addition (DVA), reduce imports, and boost exports (particularly in manufacturing, to US\$1 trillion by 2030). Electronics, general and transport machinery, automobiles, crude oil, and diamonds (some of which are included in the PLI scheme) could be significantly impacted.

However, for India to fully integrate with global markets, embracing trade liberalisation policies is essential. Signing more FTAs/RTAs facilitates access not only to new markets but also technologies and knowledge of standards. In this context, the CPTPP is a viable option, economically and politically. That is, joining the CPTPP, our results show, will lead to less-elevated deficits or even some surplus gains (Figure 21). With China excluded, the political economy will also be easier to navigate. We also examine the impact of joining RCEP and the CPTPP on the key sector of electronics, which has received attention and success following the implementation of industrial policy through the PLI scheme (see Box 1 for details).

Figure 22: Overall Effect of Mega RTAs on India's Trade Balance (Simulation Results)



TB = trade balance.
Source: Authors' estimates.

Box 1: Case of Indian Electronics Items: PLI versus Joining Mega RTAs

Let us use the case of the Indian electronics industry to demonstrate the impact of mega RTAs. Mobile phone manufacturing is often cited as a successful example of Make in India 2015. An import substitution policy has been visible to provide impetus to local manufacturing; customs duties on imports of mobile phones have progressively increased to 20%. Other policies have included the Modified Special Incentive Package Scheme of 2012, which provides capital subsidies; the Phased Manufacturing Program; and the National Policy on Electronics (2019). The Production Linked Incentive (PLI) scheme, introduced in 2020, also emerged as an alternative export-led growth strategy.

Table 8: Customs Duty Rates on Select Electronic Items (%)

Item	2016–2017	2017–2018	2018–2019	2020–2021	2021–2022	2022–2023	2023–2024
Cellular mobile phones	10	15	20	20 + 10 % service welfare cess			
Printed Circuit Board Assembly (PCBA) of charger/adaptor and moulded plastics of charger/adaptor of cellular mobile phones		Nil	10		15		
Vibrator/Ringer of mobile phones			Nil	10			
Display panel and touch assembly			Nil	10			
Inputs/sub-parts for the manufacture of specified parts of mobile phones, including PCBAs, camera module, and connectors		Applicable rate	Nil		From 0 to 2.5		From 2.5 to nil (camera lens)
Specified parts and accessories of cellular mobile phones		7.5/10	15				
PCBA of mobile phones			10	20			

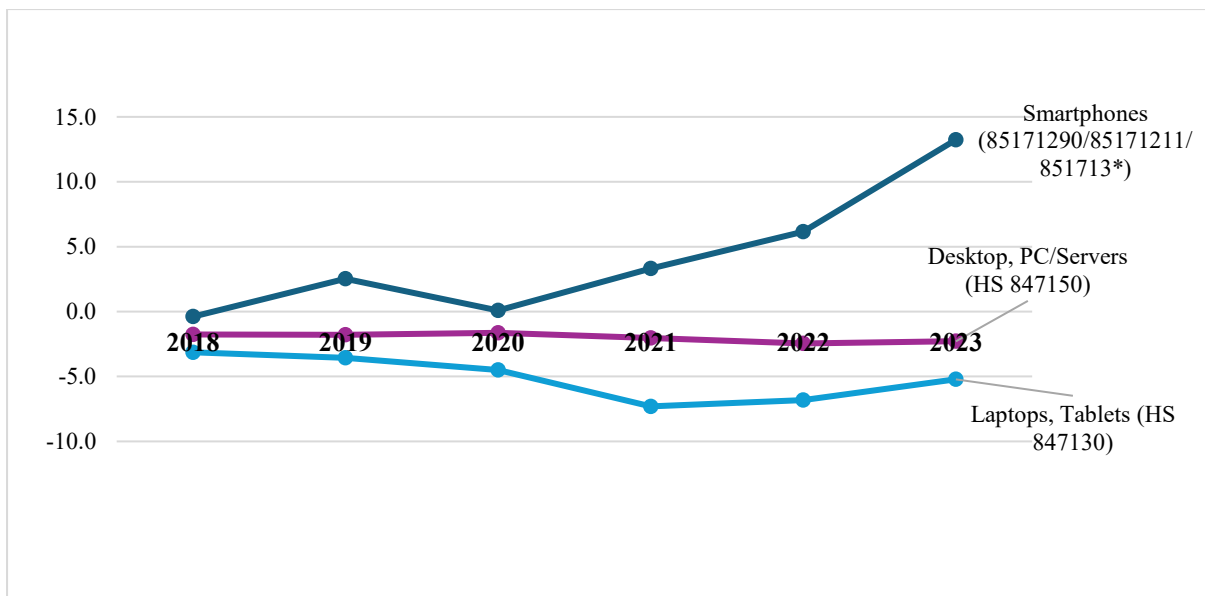
Source: Union Budget Speeches, Government of India. Mobile phones, IT hardware, semiconductor devices, and integrated circuits have been covered in India's PLI scheme and also related missions, such as for semiconductors. The question arises, has the PLI really helped export-led growth? Or has the recent reduction in import duties (Table 8) for inputs/sub-parts led to some improvement in the trade balance? The findings show success in smartphones, followed by laptops and even semiconductor devices, for which there is a trade surplus (Figures 23 and 24).

The PLI has helped to increase exports of some electronic items (mainly smartphones), but imports have also continued to increase, especially in the case of integrated circuits and semiconductor devices (Table 10). Along with this, there has been a small increase in FDI in the electronics sector (Table 9). If India agrees to sign the proposed mega RTAs, what would be the impact on these key electronic items? The smartphone is India's main export item, whilst the main imported items are integrated circuits and semiconductor devices. We use the WITS

simulation model to assess change in India’s imports with these RTAs and without them. With RTAs/FTAs, the results are for 2021, whilst without trade agreements, the change in value is taken from 2022 to 2020 (2022 is taken rather than 2023 to stay near the simulation year). The simulation results (Table 11) show that the CPTPP could be a good option in the case of India’s burgeoning electronics industry. The creation of new imports of major electronics items will decrease if India joins the CPTPP.

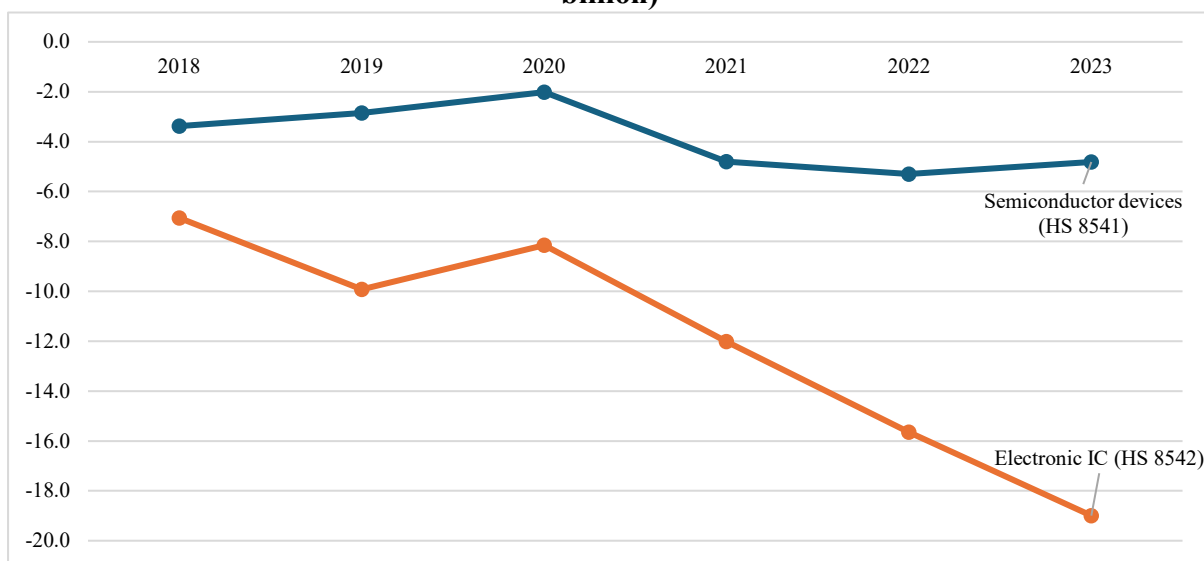
Overall, signing RTAs/FTAs could be beneficial in terms of reducing or managing imports of HS 8542 and HS 8541 goods (key drivers of the semiconductor industry). For cellular mobile phones, more new imports will be created from China, the UK, and the EU (after joining the agreements), but if India joins the CPTPP, the creation of new imports will decrease, even from East Asia (also in the case of RCEP excluding China) and Southeast Asia.

Figure 23: India’s Trade Balance in Smartphones and IT Hardware (US\$ billion)



Source: Data from ITC Trade Map.

Figure 24: India's Trade Balance in Semiconductors and Integrated Circuits (US\$ billion)



Source: Data from ITC Trade Map.

Table 9: FDI Inflows in India (US\$ billion)

Segment	2018	2019	2020	2021	2022	2023
<i>Computer hardware and software</i>	6.0	7.8	25.7	12.0	12.3	4.7
<i>Electronics</i>	0.4	0.3	0.4	0.2	0.5	0.8

Source: FDI Newsletter, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India.

Table 10: India's Exports and Imports of Selected Electronics Items (US\$ billion)

	2018	2019	2020	2021	2022	2023
<i>Smartphones (HS 85171290/85171211/851713)</i>						
Exports	1.1	3.4	1.8	4.8	7.4	14.3
Imports	1.5	0.8	1.7	1.5	1.2	1.0
<i>Semiconductor devices (HS 8541)</i>						
Exports	0.16	0.36	0.16	0.22	0.66	1.93
Imports	3.5	3.2	2.2	5.0	6.0	6.7
<i>Electronic ICs (HS 8542)</i>						
Exports	0.2	0.2	0.3	0.4	0.5	0.2
Imp.	7.3	10.2	8.4	12.4	16.1	19.2
<i>Laptops, tablets (HS 847130)</i>						
Exports	0.08	0.04	0.04	0.05	0.06	0.17
Imports	3.2	3.6	4.5	7.4	6.9	5.4

<i>Desktop, PC/servers (HS 847150)</i>						
Exports	0.04	0.05	0.05	0.09	0.11	0.12
Imports	1.8	1.8	1.7	2.1	2.6	2.4

Source: Data from ITC Trade Map.

Table 11: Simulation Results for Phones and Integrated Circuits: Before and After Proposed RTAs (US\$ million)

RCEP Member	<i>Changes in India's Imports from:</i>			
	HS 851712 (Phones)		HS 8542 (ICs)	
	Without RCEP (2022–2020)	After joining RCEP	Without RCEP (2022–2020)	After joining RCEP
China	219.64	230.30	2142.62	56.88
Australia	0.01	0.00	0.22	0.01
Thailand	3.73	0.00	20.38	-0.26
Japan	25.72	-0.04	114.34	-0.29
Malaysia	33.60	-0.07	11.50	-0.29
Indonesia	2.28	-0.92	4.55	-0.03
Singapore	-19.15	-1.04	695.53	-9.73
Rep. of Korea	320.86	-30.54	1381.29	-6.58
Viet Nam	9.02	-58.26	93.10	-0.90
Philippines	0.0577	0.0000	38.8668	-0.2654
New Zealand	0.0003	0.0000	0.0529	0.0053
<i>Total</i>	<i>595.8</i>	<i>139.4</i>	<i>4502.5</i>	<i>38.5</i>

Member of India-UK and India-EU FTAs	<i>Changes in India's Imports from:</i>			
	Phones		ICs	
	Without FTA (2022–2020)	After joining FTA	Without FTA (2022–2020)	After joining FTA
UK	-0.2	0.2	30.1	0.7
EU	7.0	9.6	1002.3	14.8

CPTPP Member	<i>Changes in India's Imports from:</i>			
	Phones		ICs	
	Without CPTPP (2022–2020)	After joining CPTPP	Without RCEP (2022–2020)	After joining CPTPP
Canada	-0.02	0.002206	2.62	0.18
Australia	0.01	0.000825	0.22	0.01
Japan	25.72	0	114.34	0.85
Malaysia	33.60	-0.000001	11.50	0.00
Singapore	-19.15	-0.000009	695.53	-0.17
Viet Nam	9.02	-0.000458	93.10	-0.02
Mexico	-0.0031		1.91	0.08
New Zealand	0.0003		0.05	0.01
<i>Total</i>	<i>49.1</i>	<i>0.003</i>	<i>919.3</i>	<i>0.94</i>

EU = European Union, IC = integrated circuit, UK = United Kingdom.

Notes: There is no change in imports for semiconductor devices (HS 8541) in the simulation models. HS 851712 covers smartphones and all other types of telephones, displays, etc. The pre-FTA change in imports and exports is taken as the value in year 2022 minus the value in year 2020.

Source: Author's estimates based on WITS SMART Simulation Analysis.

6. Discussion and Policy Recommendations

China's unprecedented and uninterrupted growth for 3 decades since the 1990s has been the subject of much research and reflection. A popular view in India is that China's high performance was because they were ruled by domineering leaders. In other words, the absence of open democracy acted as a catalyst. Whilst this is a facile explanation, it obscures certain critical features of China's growth that can serve as an exemplar for India. Serious academic research has shown that leaders in China, amongst other East Asian countries, had to 'collaborate with various sectors of their population to create an environment that was conducive to sustained growth' (Campos and Root, 1996). The business environment promoted stability; a competent bureaucracy balanced autonomy with accountability to serve all interests, including those of the poor. Investment in skills and access to minimum education standards meant that trade openness could be exploited by labour-intensive exports, which led to the creation of jobs that helped in the transition into more productive manufacturing jobs. In an influential narrative, Krugman (1994) argued that the rapid economic growth of East Asia was not miraculous at all, as it was characterised then, but rather the result of doing the right things, such as increasing factor inputs, labour, and capital, along with the robust implementation of sensible policies. The accompanying income rise created a demand for services, and in the process, the economies rapidly urbanised. Labour markets were flexible, policy changes were not random, and education was given the highest priority.

Given the above, there are some reasonable strengths and opportunities that India can also exploit through mega RTAs – but a word of caution is in order. By itself, trade openness will not be beneficial unless accompanied by domestic policy reform. Both RCEP and the CPTPP limit the influence of the US, which can be seen as an advantage for India. The CPTPP goes a step further by excluding both China and the US, potentially leading to an easier negotiation process by building like-minded coalitions within the grouping. Whilst the trade deficit is a valid concern, it is important to consider the nature of the deficit. Increased imports of intermediate goods can benefit finished goods exports by making them competitive. Additionally, evidence suggests that India's exports, particularly finished goods, have grown after signing FTAs/RTAs, potentially mitigating some of the deficit concerns. This suggests that trade agreements might not have the negative impact as is feared. As stated above, to fully leverage the potential of FTAs/RTAs, undertaking domestic reforms to remove structural deficiencies is non-negotiable.

At the same time, there are some concerns for emerging economies like India when entering such agreements. A weakening WTO system raises concerns about the effectiveness of enforcing trade rules also within mega RTAs. Whilst the proposed regional agreements might be seen as a way to bypass the WTO system, well-structured RTAs should include a well-functioning dispute resolution framework. Other concerns for India include the strict standards recommended by RTAs like the CPTPP relating to labour, the environment, competition policy, and intellectual property. This contentious issue around the imposition of regulatory frameworks by developed countries often neutralises comparative advantage and enforces stringent labour and environmental standards, sometimes above global benchmarks. A safety valve model that defines the acceptable deficit or loss thresholds per country and outlines corresponding conditions could be considered. This method is recommended because the benefits of FTAs are intangible and hard to map against an FTA commitment, whereas a trade deficit is a tangible number, creating a bias against an FTA. The safety valve approach would also reduce the need for extensive forecasting, and the approach would shift to address the challenges emanating from the continuous operation of the FTA.

All things considered, a re-evaluation of the pessimism surrounding trade agreements is necessary for India. To minimise the perceived negative impacts of FTAs and RTAs, India's trade and industrial policies should encourage exports of both intermediate and finished goods whilst attracting foreign companies to establish domestic plants or increase FDI inflows in India. This approach would require a shift from fear-based negotiation tactics to leveraging India's comparative advantages. Our analysis shows that joining the CPTPP appears preferable on various dimensions. The trade deficit is likely to be lower compared to RCEP, and India enjoys more stable geopolitical and economic ties with most CPTPP members. Additionally, the CPTPP is free from the influence of major powers like China, the US, and the EU. The Supply Chain Regional Initiative launched by Japan, Australia, and India in 2021 could be further strengthened by CPTPP membership. CPTPP can serve as a springboard or as a stepping stone for India to pursue second- and third-generation trade reforms, boost FDI inflows, and enhance supply chain diversification and resilience. The agreement can also be an opportunity to promote exports of products agreed under the Production Linked Incentive scheme, particularly to CPTPP member states.

RCEP could be a subsequent option. Whilst it offers the potential for maximising trade in intermediate goods and strengthening existing GVCs, it is more difficult to negotiate at the current juncture. A study by Pant and Paul (2018) states that it is always better to trade more with traditional partners, i.e. China and the US. Thus, India's long-term ambition around trade

liberalisation should be to focus on agreements with its existing major trading partners – but for now, the CPTPP provides a route to enhance trade engagement.

In this context, India has established itself as a global leader in services trade, with its share of global service exports steadily increasing, driven primarily by success in IT and IT-enabled services. Whilst service exports have been a key driver of economic growth, recent studies indicate that goods exports have a more significant impact on employment and overall economic expansion (Asian Development Bank, 2024; Maliszewska and Winkler, 2024). Studies highlight that goods exports and their indirect effects are more employment-intensive, underscoring the need for a balanced trade strategy that strengthens both goods and services exports to maximise the economic and labour market benefits. To enhance India's integration into GVCs, benefit greatly from trade liberalisation efforts (i.e. from proposed FTAs and RTAs), boost competitiveness, and sustain long-term export growth, policy reforms, infrastructure investment, and trade facilitation are essential.

References

- Acharya, S. (2015), 'Trade Liberalization', in J. Hölscher and H. Tomann (eds.), *Palgrave Dictionary of Emerging Markets and Transition Economics*. London: Palgrave Macmillan.
- Asian Development Bank (2024), *Asian Development Outlook (ADO) April 2024*. Manila: Asian Development Bank.
- Bajaj, P. and A. Sharma (2022), 'Factors Determining Utilization of Free Trade Agreements by Indian Textile and Clothing Companies: A Conceptual Framework Model', *Paradigm*, 26(1), pp.70–88.
- Bannister, G.J. and K. Thugge (2001), 'International Trade and Poverty Alleviation', *Finance & Development*, 38(4).
- Campos, J.E. and H.L. Root (1996), *The Key to the Asian Miracle: Making Shared Growth Credible*. Brookings Institution Press.
- Escaith, H. (2021), 'Withering Globalization? The Global Value Chain Effects of Trade Decoupling', *MPRA Paper 107935*. Munich Personal RePEc Archive.
- Fukuda, K. (2019), 'Effects of Trade Liberalization on Growth and Welfare Through Basic and Applied Researches', *Journal of Macroeconomics*, 62(103058).

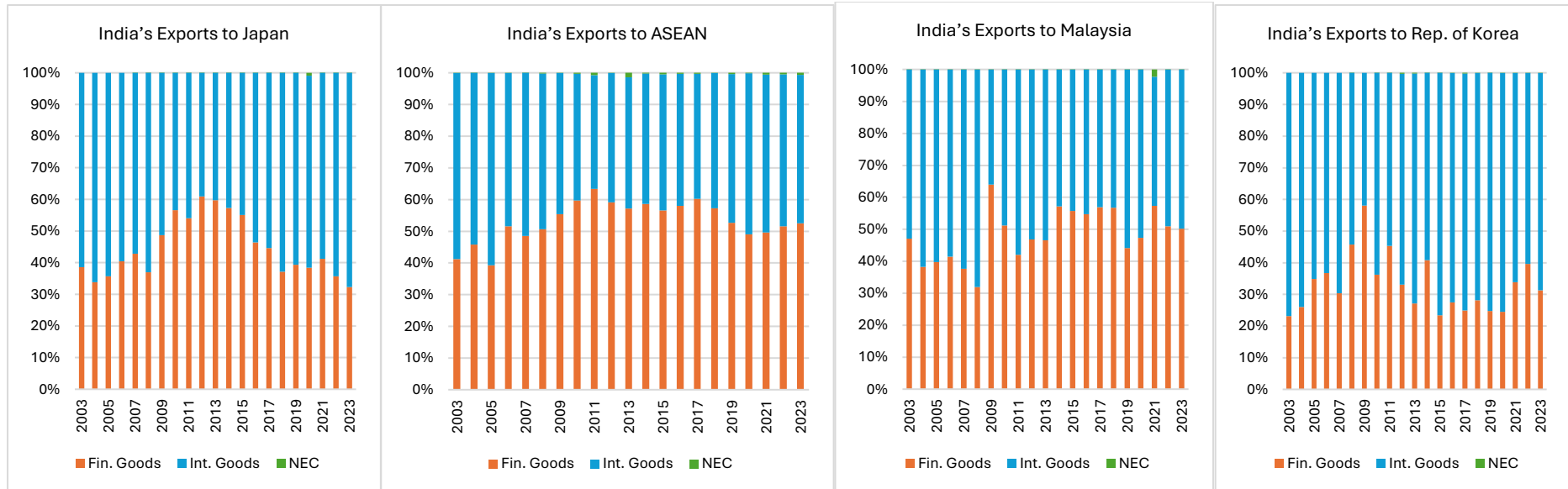
- Garcia-Herrero, A. (2022), 'Slowbalisation in the Context of US-China Decoupling', *Intereconomics*, 57(6), pp.352–8.
- Garg, A. (2022), 'INDIA – ASEAN: Trade Relation Analysis and Its Exclusion from RCEP', Working Paper. Indian Economic Service, Government of India.
- Ghoshal, I. (2015), 'Trade-Growth Relationship in India in the Pre and Post Trade Agreements Regime', *Procedia Economics and Finance*, 30, pp.254–64.
- Gupta, N. (2024), 'G20's Contribution to Inclusive and Resilient Global Value Chains While Promoting Involvement of Least Developed Countries', *ADB Working Paper* No. 1446. Tokyo: Asian Development Bank Institute.
- Hoda, A. and D.K. Rai (2014), 'Trade and Investment Barriers Affecting International Production Networks in India', Working Paper 281. New Delhi, India: ICRIER.
- Huria, S. (2020), *Gains from Free Trade Agreements: A Theoretical Analysis*. MPRA Paper.
- International Monetary Fund (IMF) (2001), *Global Trade Liberalization and the Developing Countries*. Issue Brief 01/08. Washington, DC: International Monetary Fund.
- (2019), 'Getting the Most out of Trade Liberalization: Evidence from Machine Learning and Threshold Models', *IMF Research Bulletin*, Fall-Winter, 2019 (003).
- (2022), 'Global Trade and Value Chains during the Pandemic', in *World Economic Outlook: War Sets Back the Global Recovery*. International Monetary Fund, pp.87–107.
- Kapustina, L., L. Lipková, Y. Silin, and A. Drevalov (2020), 'US-China Trade War: Causes and Outcomes', *SHS Web of Conferences*, 73(01012).
- Kaushal, L.A. (2022), 'Impact of Regional Trade Agreements on Export Efficiency – A Case Study of India', *Cogent Economics & Finance*, 10(1).
- Kearney (2023), *America Is Ready for Reshoring. Are You? Tenth Anniversary of Kearney's Annual Reshoring Index*. Kearney.
- Khan, M.A., T. Walmsley, and K. Mukhopadhyay (2021), 'Trade Liberalization and Income Inequality: The Case for Pakistan', *Journal of Asian Economics*, 74(101310).
- Khatai, P. and C. Kim (2023), 'Impact of India's Free Trade Agreement with ASEAN on Its Goods Exports: A Gravity Model Analysis', *Economies*, 11(1), 8.
- Krishna, P. (2019), 'India's Trade Agreements and the Future of Indian Trade Policy', Working Paper 05. New York: Deepak and Neera Raj Center on Indian Economic Policies.
- Krugman, P. (1994), 'The Myth of Asia's Miracle', *Foreign Affairs*, 73, pp.62–78.
- Kwan, C.H. (2019), 'The China–US Trade War: Deep-Rooted Causes, Shifting Focus and Uncertain Prospects', *Asian Economic Policy Review*, 15(1), pp.55–72.

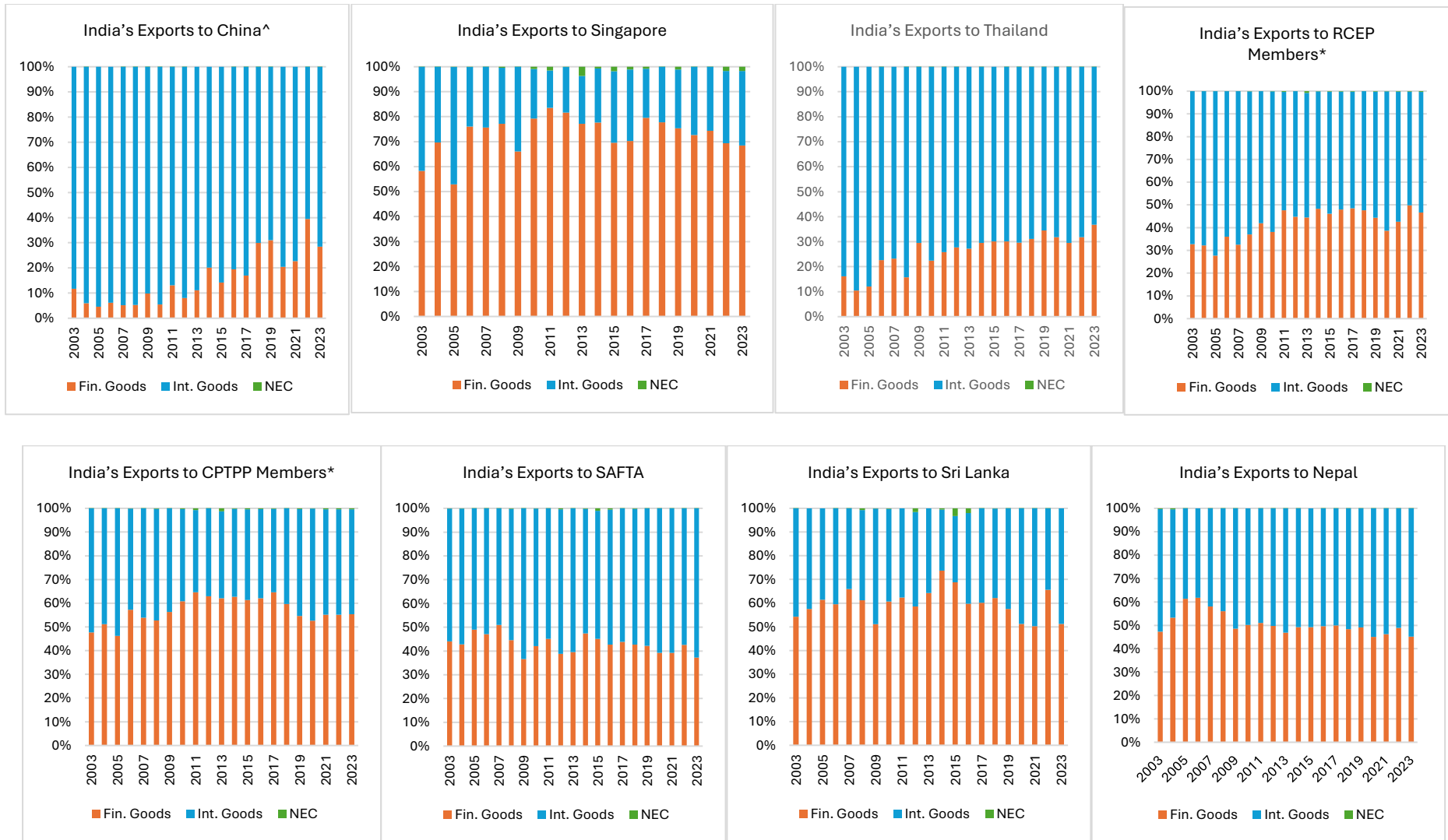
- Li, B.G., P. Loungani, and J.D. Ostry (2018), *Trade, Growth and Inequality: Evidence from China*. International Monetary Fund.
- Maliszewska, M. and D.E. Winkler (2024), *Leveraging Trade for More and Better Jobs*. Prosperity Insight Series. Washington, D.C.: World Bank Group.
- Manni, U.H. and M.N. Ibne Afzal (2012), 'Effect of Trade Liberalization on Economic Growth of Developing Countries: A Case of Bangladesh Economy', *Journal of Business, Economics and Finance*, 1(2).
- Mishra, D., N. Gupta, S. Dua, and S. Agarwal (2022), *Globalise to Localise: Exporting at Scale and Deepening the Ecosystem are Vital to Higher Domestic Value Addition in Electronics*. New Delhi, India: ICRIER.
- Mishra, P. and U. Kumar (2005), 'Trade Liberalization and Wage Inequality: Evidence from India', *IMF Working Paper* 05/20. International Monetary Fund.
- Mohanty, S.K. (2024), 'Exploring Trade, GVCs, and Technology Goods in India's FTAs', *Economic & Political Weekly*, 59(46).
- Observer Research Foundation (ORF) (2021), *India's Reluctance in Joining the RCEP — A Boon or a Bane in the Long-run?* Essay Series – Expert Speak. New Delhi, India: Observer Research Foundation.
- (2022). *Why India is Losing Out on CPTPP*. Essay Series – Commentaries. New Delhi, India: Observer Research Foundation.
- Pandey, D. and M. Unnikrishnan (2023), *Free Trade Agreements (FTAs) by India: Review and Implications for Future*. Research and Policy Insights on Financial Markets and Economy. Ahmedabad, India: Misra Centre for Financial Markets and Economy, Indian Institute of Management Ahmedabad.
- Pant M. and A. Paul (2018), 'The Role of Regional Trade Agreements in the Case of India', *Journal of Economic Integration*, 33(3), pp.538–71.
- Petri, P.A. and M.G. Plummer (2023), 'Scenarios for a Global New Normal and ASEAN Value Chains', Chapter 6, in *ASEAN and Global Value Chains: Locking in Resilience and Sustainability*. Asian Development Bank.
- Pohit, S., R. Chadha, and D. Pratap (2019), *The US-China Trade War: Impact on India and its Policy Choices*. New Delhi: NCAER.
- Randhawa, D.S. (2019), 'Understanding India's Reluctance at the WTO E-commerce Talks', *ISAS Insights*, 547. National University of Singapore.
- Rodrik, D. (2022), 'He Predicted Globalization's Failure, Now He's Planning What's Next', Policy Cast by Ralph Ranalli. Harvard Kennedy School.

- Salama, V. (2023), *U.S. Pursues India as a Supply-Chain Alternative to China*. Wall Street Journal.
- Seshadri, V.S. (2022), ‘Opportunities and Challenges in India’s International Trade International Trade’, *National Security*, 5(4), pp.382–99.
- Shu, P. and C. Steinwender (2019), ‘The Impact of Trade Liberalization on Firm Productivity and Innovation’, *Innovation Policy and the Economy*, 19, pp.39–68.
- Srivastava, A., S.K. Mathur, and R. Mathur (2022), *India’s Possible Alignment with RCEP & CPTPP and Its Relative Gains and Losses*. APAC Report. Ankara: Turkish Center for Asia Pacific Studies (APAC).
- Tatkare, D. and P. Vasava (2023), ‘Impact of Regional Trade Agreement of Indian Export’, *International Journal of Creative Research Thoughts (IJCRT)*, 11(3).
- World Bank (2005), *Global Economic Prospects 2005 Trade, Regionalism and Development*. Washington, DC: World Bank.
- World Trade Organization (WTO) (2020), *World Trade Report 2020: Government Policies to Promote Innovation in the Digital Age*. Geneva, Switzerland: WTO.
- Yameogo, C.E.W. and J.A. Omojolaibi (2021), ‘Trade Liberalisation, Economic Growth and Poverty Level in Sub-Saharan Africa (SSA)’, *Economic Research-Ekonomska Istraživanja*, 34(1), pp.754–74.
- Zakaria, M. (2014), ‘Effects of Trade Liberalization on Exports, Imports and Trade Balance in Pakistan: A Time Series Analysis’, *Prague Economic Papers 2014*, 23(1), pp.121–39.
- Zhang, G. (2021), *Supply Chain Diversification: China Retains a Strategic Role*. Upply. <https://market-insights.upply.com/en/supply-chain-diversification-china-retains-a-strategic-role>

Appendix

Figure A: India's Shares of Intermediate and Finished Goods Exports to Existing and Proposed FTA and RTA Partners and China







ASEAN = Association of Southeast Asian Nations, CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership, EU = European Union, Fin. Goods = Finished Goods, Int. Goods = Intermediate Goods, NEC = Not Elsewhere Classified, RCEP = Regional Comprehensive Economic Partnership, SAFTA = South Asian Free Trade Area, UAE = United Arab Emirates, UK = United Kingdom.

Note: * denotes proposed FTA/RTA members; ^ denotes non-FTA members.

Source: World Integrated Trade Solution (WITS) database, World Bank.

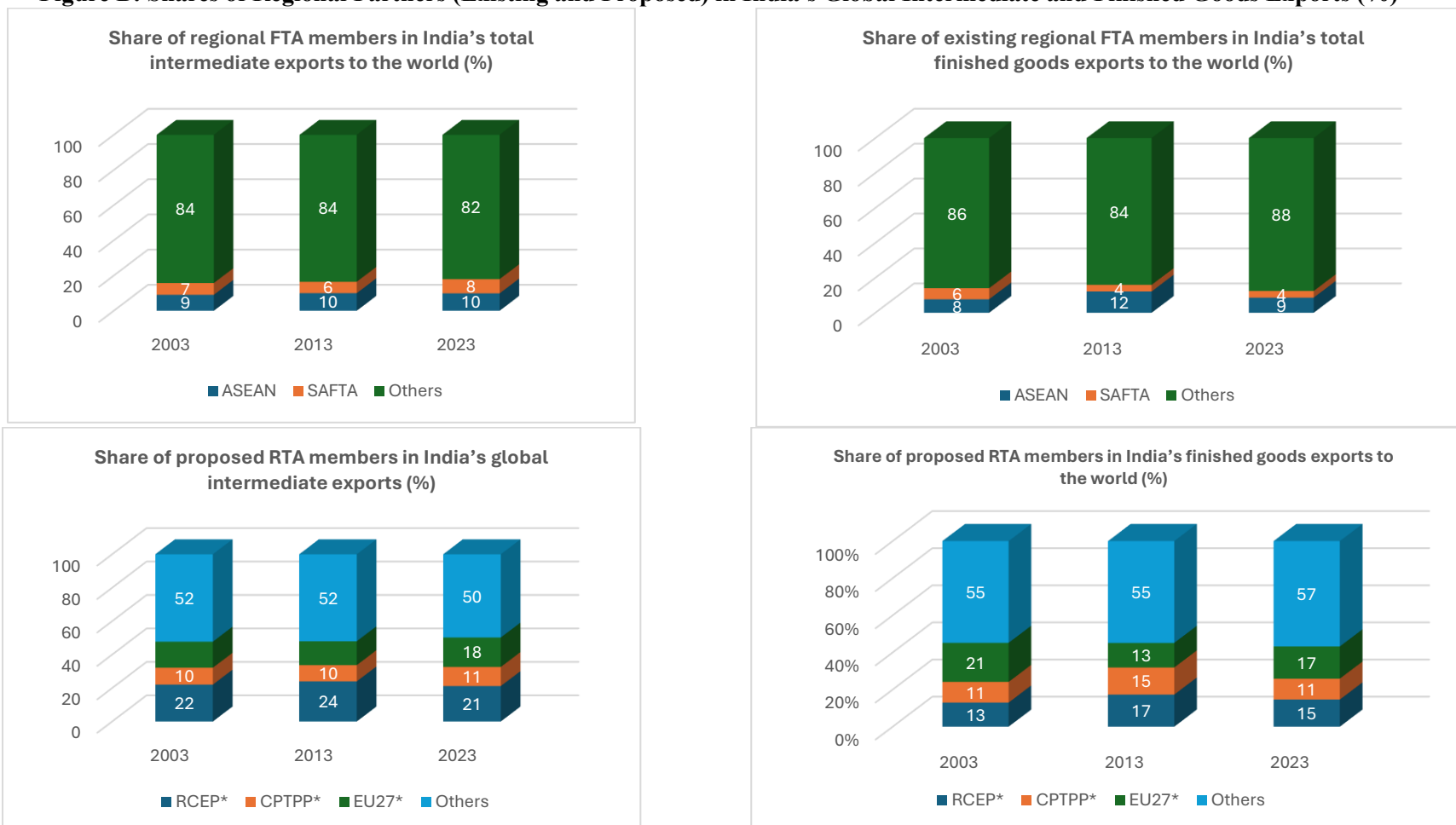
Table A: Share of India's Existing and Proposed Bilateral FTA Partners in India's Global Intermediate and Finished Goods Exports

<i>Bilateral FTA Partner</i>	<i>Share of FTA Partner in India's Global Intermediate Exports (%)</i>			<i>Share of FTA Partner in India's Finished Goods Exports to the World (%)</i>		
	2003	2013	2023	2003	2013	2023
Australia	0.9	0.6	1.0	0.9	0.8	2.4
Bhutan	0.2	0.0	0.3	0.1	0.0	0.2
Japan	3.2	1.9	1.8	2.5	2.4	0.7
Rep. of Korea	1.6	2.1	2.3	0.6	0.7	0.8
Malaysia	1.3	1.9	1.8	1.4	1.4	1.4
Mauritius	0.4	0.1	0.1	0.2	0.5	0.2
Nepal	0.9	1.1	2.1	1.0	0.8	1.4
Singapore	2.1	1.7	1.9	3.6	6.2	3.4
Sri Lanka	1.7	1.1	0.9	2.4	1.7	0.8
Thailand	1.9	1.9	1.7	0.4	0.6	0.8
United Arab Emirates	6.5	10.1	5.4	7.8	10.3	9.4
United Kingdom*	3.1	2.2	2.7	6.5	4.0	3.1
Non-FTA/RTA partners	76.2	75.3	78.1	72.5	70.3	75.5

Note: * denotes proposed FTA/RTA members.

Source: World Integrated Trade Solution (WITS) database, World Bank.

Figure B: Shares of Regional Partners (Existing and Proposed) in India's Global Intermediate and Finished Goods Exports (%)



ASEAN = Association of Southeast Asian Nations, CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership, EU = European Union, RCEP = Regional Comprehensive Economic Partnership, SAFTA = South Asian Free Trade Area.

Note: * denotes proposed FTA/RTA members.

Source: World Integrated Trade Solution (WITS) database, World Bank.

Table B: Shares of India's Top Trading Partners (%)

2018		2023	
China	11.4	China	12.5
United States	9.6	United States	10.7
United Arab Emirates	6.4	Russia	6.4
Saudi Arabia	4.2	United Arab Emirates	6.4
Hong Kong	3.4	Saudi Arabia	4.1
Iraq	3.2	Iraq	3.0
Singapore	2.9	Indonesia	2.8
Germany	2.8	Germany	2.5
Rep. of Korea	2.6	Australia	2.4
Indonesia	2.6	Rep. of Korea	2.3

Source: World Integrated Trade Solution (WITS) database, World Bank.

Table C: Top 50 Products for Which India's Imports Are Likely to Be Increased Post-RCEP

Partner	HS Code	Description	Total Trade Effect (Rise in Imports, US\$ billion)
China	860900	Containers, incl. containers for the transport of fluids, specially designed and equipped for ...	1.44
China	851610	Electric instantaneous or storage water heaters and immersion heaters	1
China	851770	Parts of telephone sets, telephones for cellular networks or for other wireless networks, and ...	0.79
China	870410	Dumpers for off-highway use	0.77
China	761090	Structures and parts of structures of aluminum, n.e.s., and plates, rods, profiles, tubes ...	0.63
China	841810	Combined refrigerator-freezers with separate external doors or drawers, or combinations thereof	0.59
China	851822	Multiple loudspeakers mounted in the same enclosure	0.46
Thailand	240319	Smoking tobacco, whether or not containing tobacco substitutes in any proportion (excl. water-pipe ...	0.45
China	841960	Machinery for liquefying air or other gases	0.45
Malaysia	151110	Crude palm oil	0.44
China	350691	Adhesives based on polymers of headings 3901 to 3913 or on rubber (excl. put up for retail ...	0.43
China	830241	Base metal mountings and fittings suitable for buildings (excl. locks with keys and hinges)	0.42
China	640299	Footwear with outer soles and uppers of rubber or plastics (excl. covering the ankle or with ...	0.4

China	841451	Table, floor, wall, window, ceiling, or roof fans, with a self-contained electric motor of an ...	0.38
Indonesia	151110	Crude palm oil	0.36
Australia	710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excl. gold in ...	0.31
China	741820	Sanitary ware and parts thereof, of copper (excl. cans, boxes and similar containers of heading ...	0.3
Indonesia	151190	Palm oil and its fractions, whether or not refined (excl. chemically modified and crude)	0.29
China	291521	Acetic acid	0.27
China	841583	Air conditioning machines comprising a motor-driven fan, not incorporating a refrigerating ...	0.27
China	940161	Upholstered seats with wooden frames (excl. convertible into beds)	0.27
China	850440	Static converters	0.25
Indonesia	400122	Technically specified natural rubber TSNR	0.24
China	851712	Telephones for cellular networks, mobile telephones, or for other wireless networks	0.23
China	854370	Electrical machines and apparatus, having individual functions, n.e.s. in chapter 85	0.22
China	691090	Ceramic sinks, washbasins, washbasin pedestals, baths, bidets, water closet pans, flushing ...	0.22
China	852580	Television cameras, digital cameras and video camera recorders	0.2
China	690510	Roofing tiles	0.2
China	842649	Mobile cranes and works trucks fitted with a crane, self-propelled (excl. those on tyres and ...	0.2
Australia	270119	Coal, whether or not pulverised, non-agglomerated (excl. anthracite and bituminous coal)	0.19
China	841830	Freezers of the chest type, of a capacity \leq 800 l	0.19
China	870600	Chassis fitted with engines, for tractors, motor vehicles for the transport of ten or more ...	0.19
China	852990	Parts suitable for use solely or principally with flat panel display modules, transmission ...	0.18
Indonesia	090111	Coffee (excl. roasted and decaffeinated)	0.16
China	380899	Rodenticides and other plant protection products put up for retail sale or as preparations ...	0.16
China	640320	Footwear with outer soles of leather and uppers, which consist of leather straps across the ...	0.16
Viet Nam	400122	Technically specified natural rubber TSNR	0.15
Rep. of Korea	870840	Gear boxes and parts thereof, for tractors, motor vehicles for the transport of ten or more ...	0.15
China	310560	Mineral or chemical fertilisers containing the two fertilising elements phosphorus and potassium ...	0.15
China	850760	Lithium-ion accumulators (excl. spent)	0.15

Japan	870840	Gear boxes and parts thereof, for tractors, motor vehicles for the transport of ten or more ...	0.15
Thailand	841581	Air conditioning machines incorporating a refrigerating unit and a valve for reversal of the ...	0.14
China	392690	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s (excl. ...)	0.14
China	540331	Yarn of viscose rayon filament, incl. monofilament of < 67 decitex, single, untwisted, or with ...	0.13
China	851632	Electro-thermic hairdressing apparatus (excl. hairdryers)	0.13
China	600622	Dyed cotton fabrics, knitted or crocheted, of a width of > 30 cm (excl. warp knit fabrics incl. ...)	0.13
Thailand	841583	Air conditioning machines comprising a motor-driven fan, not incorporating a refrigerating ...	0.13
China	870840	Gear boxes and parts thereof, for tractors, motor vehicles for the transport of ten or more ...	0.12
Viet Nam	090111	Coffee (excl. roasted and decaffeinated)	0.12
Singapore	220820	Spirits obtained by distilling grape wine or grape marc	0.12

Source: Authors estimates.

Table D: Top 30 Products for Which Indias Imports Are Likely to Be Increased Post-CPTPP

Partner	HS Code	Description	Total Trade Effect (Rise in Imports, US\$ billion)
Malaysia	151110	Crude palm oil	0.79
Peru	710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excl. gold in ...	0.62
Australia	710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excl. gold in ...	0.31
Australia	270119	Coal, whether or not pulverised, non-agglomerated (excl. anthracite and bituminous coal)	0.19
Viet Nam	400122	Technically specified natural rubber TSNR	0.18
Chile	080231	Fresh or dried walnuts, in shell	0.18
Japan	870840	Gear boxes and parts thereof, for tractors, motor vehicles for the transport of ten or more ...	0.16
Malaysia	151190	Palm oil and its fractions, whether or not refined (excl. chemically modified and crude)	0.15
Viet Nam	090111	Coffee (excl. roasted and decaffeinated)	0.12
Singapore	220820	Spirits obtained by distilling grape wine or grape marc	0.12
Malaysia	291521	Acetic acid	0.12
Australia	260111	Non-agglomerated iron ores and concentrates (excl. roasted iron pyrites)	0.11
Malaysia	400122	Technically specified natural rubber TSNR	0.11
Singapore	870324	Motor cars and other motor vehicles principally designed for the transport of ...	0.10
Australia	281820	Aluminium oxide (excl. artificial corundum)	0.10
Japan	840820	Compression-ignition internal combustion piston engine diesel or semi-diesel engine, for ...	0.09
Viet Nam	851610	Electric instantaneous or storage water heaters and immersion heaters	0.09
Singapore	151110	Crude palm oil	0.08
Singapore	291521	Acetic acid	0.08
Malaysia	270900	Petroleum oils and oils obtained from bituminous minerals, crude	0.07
Canada	071340	Dried, shelled lentils, whether or not skinned or split	0.07
Singapore	310230	Ammonium nitrate, whether or not in aqueous solution (excl. that in tablets or similar forms, ...	0.06
Singapore	400122	Technically specified natural rubber TSNR	0.06
Viet Nam	350691	Adhesives based on polymers of headings 3901 to 3913 or on rubber (excl. put up for retail ...	0.06
Japan	840991	Parts suitable for use solely or principally with spark-ignition internal combustion piston ...	0.06
Viet Nam	090220	Green tea in immediate packings of > 3 kg	0.06

Viet Nam	030462	Frozen fillets of catfish <i>Pangasius</i> spp., <i>Silurus</i> spp., <i>Clarias</i> spp., <i>Ictalurus</i> spp.	0.06
Mexico	710812	Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (excl. gold in ...)	0.05
Singapore	151190	Palm oil and its fractions, whether or not refined (excl. chemically modified and crude)	0.04
Japan	350691	Adhesives based on polymers of headings 3901 to 3913 or on rubber (excl. put up for retail ...)	0.04

Source: Authors estimates.

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